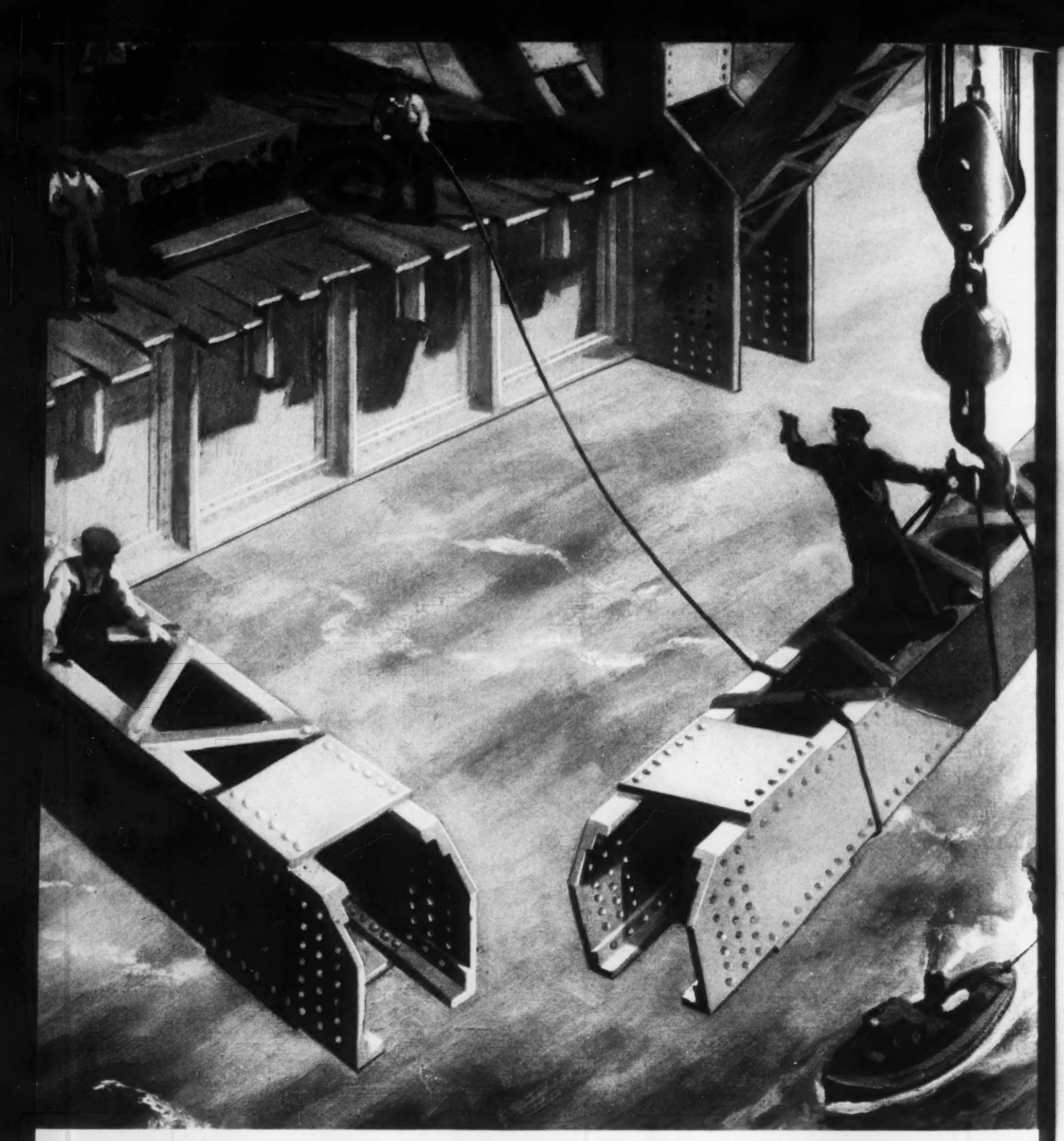
NEWS

Pillars of smoke give split-second warning of a huge quarry blast — see p. 5.



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ENGINEERING NEWS-RECORD

NEWS

Volume 123 DECEMBER 28, 1939 Number 26

NOTES ON THE NEWS

Quick Surveys of Construction Events

▶ Construction volume for 1939 is going to exceed 1938 by nearly 10 per cent, according to the figures compiled weekly by this journal. For the 51 weeks so far recorded the total is over 3 billion dollars, or an 8 per cent increase over last year. Private contract awards dropped off last week for the first time in fifteen weeks, but in total they will be well ahead of last year.

▶ Talk from high places in Washington concerns the building of hospitals with federal funds to be maintained at local expense. Facilities would be provided where none exist now. Legislation would be required, as no PWA funds are available.

▶ Tentative plans for an express highway from Boston to Washington were discussed last week at New York. Actual construction of such a road still appears to be in the remote future so many obstacles stand in its way.

▶ Worthy of note is the fact that two engineers who fifty years ago started an engineering firm that now has a world-wide reputation are still active in its affairs as the firm rounds out half a century. Our congratulations to Charles A. Stone and Edwin S. Webster.

▶ Tightening budget strings in Washington have reduced administrative appropriations for USHA and PWA, foreshadowing layoffs of a considerable number of engineering employees.

▶ The ban on transfers from Denver to the Panama Canal Zone that has caused so much concern among the younger engineers of the Bureau of Reclamation is to be eased, according to reports from Washington.

▶ Continuing its drive against high costs of construction, the Department of Justice has had indictments brought against the major electric supply companies in Detroit.

Missouri River Bridge Placed in Service

The toll highway bridge across the Missouri River at Rulo, Neb., has been placed in operation. Total cost of the structure was $761,000. Of this amount $326,000 was supplied by a PWA grant and the balance by the sale of revenue bonds by Richardson County, Neb.

The Missouri Valley Bridge & Iron Co., Leavenworth, Kansas, with a contract of $599,425 was the general contractor. Harrington & Cortelyou, Kansas City, were consulting engineers.

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Bids Opened at Los Angeles For Sepulveda Dam

Eleven bids for construction of Sepulveda Dam on the Los Angeles River were opened Dec. 21 by Col. Edwin C. Kelton, U. S. District Engineer at Los Angeles. The lowest bid was submitted jointly by Jahn & Bressi Construction Co. and the Union Paving Co., both of Los Angeles. It totaled $3,121,000, and the engineers' estimate was $3,950,000.

The dam is to be an earth-fill structure with a crest length of 15,500 ft.

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Pennsylvania Superhighway To Cost $9,000,000 More

Cost of Pennsylvania's toll superhighway between Pittsburgh and Harrisburg will be nearer $70,000,000 than the original estimated cost of $61,000,000, according to Walter A. Jones, chairman of the Pennsylvania Turnpike Commission. The announcement followed a meeting of the commission at which it was decided to grant an additional $8,950,000 "as a cushion, to be certain of ample funds to finish the turnpike with all improvements necessary to make this the safest highway in the country."

PWA has increased its original grant of $26,100,000 to $29,250,000, and the RFC has agreed to purchase an additional $5,800,000 worth of bonds, Jones stated.

Transfer of U. S. B. R. Employees Studied

Engineering staff of Denver office involved; assistant secretary considers problem

Modification of the ban on transfers to other agencies by engineering employees in the Denver office of the Bureau of Reclamation is being studied by Assistant Secretary of the Interior E. K. Burlew. A plan to permit transfer of a certain percentage of the employees was considered but dropped as infeasable. At present an attempt is being made to formulate standards by which each case can be considered on its merits, Burlew told an *ENR* reporter.

The matter was brought to Secy. Burlew's attention last week by the FAECT, CIO union of technical men, which has been trying unsuccessfully to get the ban lifted through conferences with Commissioner of Reclamation Page.

The ban is still in effect, but union representatives claim to have received definite assurances from Burlew that the policy will be changed; Burlew, they say, asked FAECT to submit proposals

(Continued on page 2)

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Tolls Reduced On California Bay Bridge

Passenger automobile tolls on the San Francisco-Oakland Bay Bridge will be reduced Jan. 1 from 40 to 35 cents in accordance with a decision reached by the California Toll Bridge Authority Dec. 12. On the new basis there will be no charge for extra passengers. Corresponding reductions are to be made in tolls on trucks, busses and other vehicles as well as on commutation fares.

At the same meeting the Toll Bridge Authority voted to buy for $100,000 the existing bridge approaches from the Golden Gate Exposition grounds; these approaches were financed by the exposition and the city of San Francisco. The $100,000 will be used for expenses incident to reopening the exposition in 1940.

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U. S. B. R. Employees

(Continued from page 1)

as to what changes could be made without weakening the Denver staff. Several other grievances which have been agitating the Denver local of FAECT were also straightened out at the meeting. Burlew, it is stated, told the union a survey would be made next month to insure that compensation at Denver corresponds in all cases to the duties being performed and that he would order that permission be given for distribution of union literature through the official channels and its display on bulletin boards.

The transfer issue arose some months ago when the Panama Canal was seeking to hire a large number of engineers. So many of the Denver men applied for transfers that it was feared the efficiency of the staff might be impaired, and an agreement was made that no recruiting would be attempted in the Denver office.

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Boston-Washington Express Highway Studied

Highway officials of eight North Atlantic seaboard states met with Thomas H. MacDonald, chief of the Public Roads Administration, in New York City, Dec. 19 to study the needs for a superhighway between Boston and Washington. At the end of the meeting they unanimously agreed to cooperate in pushing plans for such a 400-mile express road.

The cost of such a road is placed at $200,000,000.

E. Donald Sterner, highway commissioner of New Jersey, was appointed chairman of the committee to prepare plans for the project in cooperation with the PRA.

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Stone & Webster Celebrate 50th Anniversary

The firm of Stone & Webster, Inc., specialists in engineering construction, utility financing and management, this week celebrates the 50th anniversary of its organization. The firm was founded in 1889 by Charles A. Stone and Edwin S. Webster, two young electrical engineers who had graduated the previous year from Massachusetts Institute of Technology. Both still are active in the firm, being chairman and vice chairman, respectively, of the company. In the 50 years since its organization the company has completed construction work costing over one billion dollars. This includes such projects as the Rock Island power project on the Columbia River, the Osage power scheme in Missouri and Conowingo Dam on the Susquehanna River. In its early years the company centered its activities on electric utility construction, but in later years it went into financing work, valuation and utility management. In recent years the construction activities have been expanded to include large industrial plants.

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A. M. Stewart Dies; Widely-Known Builder

A. M. Stewart, chairman of the board of directors of James Stewart & Co., New York City contracting firm, died Dec. 21 in New York City at the age of 82. Stewart was in charge of the rebuilding of the Galveston waterfront after the 1899 storm and during the World War he supervised much construction carried out by the American Expeditionary Force.

Buildings erected in New York City under his direction include Madison Square Garden, the American Museum of Natural History, the new Federal Office Building, Grand Central Palace, and the Herald Tribune Building. He also was in charge of the construction in Washington of the Interstate Commerce Building, the Department of Labor Building, and headquarters of the Chamber of Commerce of the United States. The state capital buildings of Utah, Oklahoma and Idaho, the union terminal station in Cincinnati and the Mitsui Bank building in Tokyo were also erected under his direction.

He had been with the Stewart firm for 62 years, having been made a junior partner in 1886.

Welding Inspectors' School Held in Pittsburgh

An eight-session course for welding inspectors was completed last week by fourteen representatives from the Pittsburgh bureau of building inspection, eight from the Allegheny County department of public works, three from the Pittsburgh bureau of tests, and about twenty-five others from local commercial testing laboratories. This unique venture, sponsored by the Westinghouse Electric & Manufacturing Co., was stimulated by a new city of Pittsburgh ordinance that legalizes structural welding.

The course began with a review of the present status of welding in the structural field and then considered the welding process itself by a study of arc-welding machines, electrodes and technique. One session was devoted to the basic principles of good welding that inspectors must understand and a consideration of the characteristics of good and poor welds. Those taking the course were required to do actual welding and to study the practical considerations that affect structural weld design and fabrication. A final session was devoted entirely to gas welding and gas cutting.

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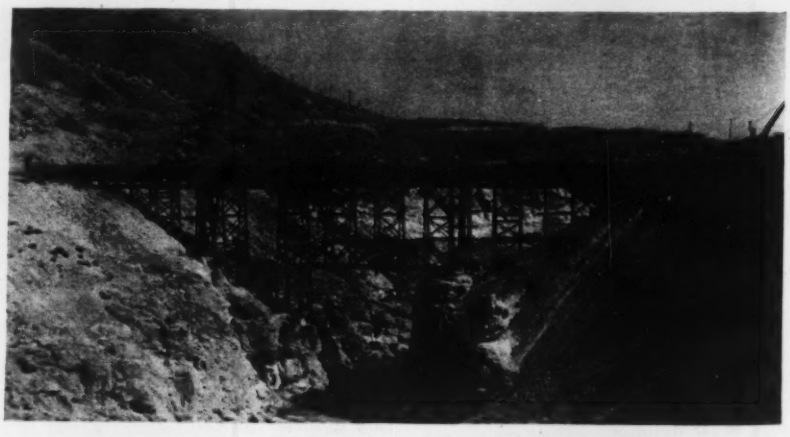
Missouri Utility Plans $20,000,000 Improvement

The Union Electric Co. of Missouri, major unit of the North American Co., recently announced a 20 million dollar construction program to start in the near future. This is the largest undertaking by the utility and its subsidiaries in recent years.



TO BE LONGEST SELF-SUPPORTING PIPE SPAN

NOW RESTING temporarily on timber falsework, this inverted siphon across the Shoshone River when completed will have a central span of 150 ft. or what is believed to be the longest self-supporting pipe span in the world. Side spans are to be 80 ft. long.

The siphon is part of a 28-mile Heart Mountain Canal, which will carry water from the Shoshone River reservoir to irrigate 41,000 acres of the Shoshone federal project in Wyoming.

WASHINGTON HIGHLIGHTS

Special reports by Paul Wooton

USHA is now gently breaking the news to its staff of 1,400 or so that within the next three months a quarter to a third of them will be furloughed or laid off; first big batch is scheduled to go Jan. 15. This is in spite of the fact that the Budget Bureau has already approved administrative expenditures for next year of $4,500,000—equal to this year. Explanation is that last Spring and Summer, the authority greatly enlarged its staff in the expectation that Congress would pass the pending housing bill, and another big program would have to be handled.

NOT UNEXPECTED is a 75 per cent cut in the administrative funds of PWA. The Budget Bureau is understood to have approved an administrative allotment of $4,000,000 as compared with $16,000,000 for the same purpose last year. PWA activities are tapering off as more and more projects reach completion; in the past three months the staff has just about been cut in half.

THAT A PUBLIC OWNERSHIP *quid pro quo* might be demanded by the administration if power rates at Boulder Dam are to be scaled down as is desired by local interests was indicated by Secretary Ickes last week. At present Boulder Dam itself is operated by the Bureau of Reclamation, but of the eight large generators six are leased, maintained, and operated by the city of Los Angeles and two by Southern California Edison Co. In announcing that representatives of the states and the power users were now conferring with bureau officials on the form that legislation should take, Ickes insisted that he has an open mind on the subject but that in his opinion the power plant should have been government operated from the start. It is known that bureau officials have chafed under the triple control at Boulder, and a bill adjusting the power rates which was introduced last session, with no public power feature, by Representative Scrugham was withdrawn after the bureau had objected to some features.

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Paris Bridge Collapses; Struck by Barge

The Louis Phillipe Bridge, an ancient iron rib arch structure spanning the Seine River at Paris and joining the island of St. Louis with the city collapsed Dec. 22 when a barge struck it. Casualties were said to number at least 20.

WILLERT PARK HOUSING PROJECT COMPLETED AT BUFFALO

BY MISTAKE a photograph showing the Kenfield housing project in Buffalo was used in an item in the Dec. 14, 1939, issue p. 792, describing the Willert Park project of that city. The Willert Park project is shown above.

Kenfield housing was completed two years ago as a PWA project at a cost of $4,755,000. It houses 658 families with rents varying from $25.25 to $33 and has just recently been leased by the local authorities from USHA.

The Willert Park project provides 173 dwelling units and cost $914,000. The development is located in the negro slum area and rents will vary from $18 to $21.25.

For the Willert Park work L. A. Cheery, Industrial Planning Corp., Buffalo, acted as consulting engineer and Fred C. Backus, Buffalo, was the architect. For both projects, the Fleischer Engineering Construction Co., Buffalo, was the contractor.

National Sewage Works Group May Be Formed

Announcement expected at 25th anniversary meeting of New Jersey Sewage Works Association

Celebration of the 25th anniversary of the New Jersey Sewage Works Association in Trenton, March 20-22, may be the occasion for the formation of a national organization of sewage plant operators. The New Jersey organization is the oldest sewage operators group in the country, and it was largely through its efforts that New Jersey became the first state to adopt laws requiring operators to qualify by examination to operate treatment plants.

Although locally sponsored, the silver anniversary convention will be of country-wide interest in view of the possible announcement of a plan calling for the establishment of a national sewage plant operators' society or affiliation of present groups with an existing professional organization. At the present time there are twenty-five sewage operators' and conference associations with a membership of about 2,800, including affiliates in foreign countries. These groups have, since 1928, coordinated their interests by means of a central agency known as the Federation of Sewage Works Associations.

Chairman of the anniversary program committee is William Orchard, general sales manager, Wallace & Tiernan Co., Inc., who is assisted by Harry P. Croft, chief engineer of the N. J. State Dept. of Health. Paul Molitor, Jr., is president of the association.

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Canada Housing Loans To Be Reduced

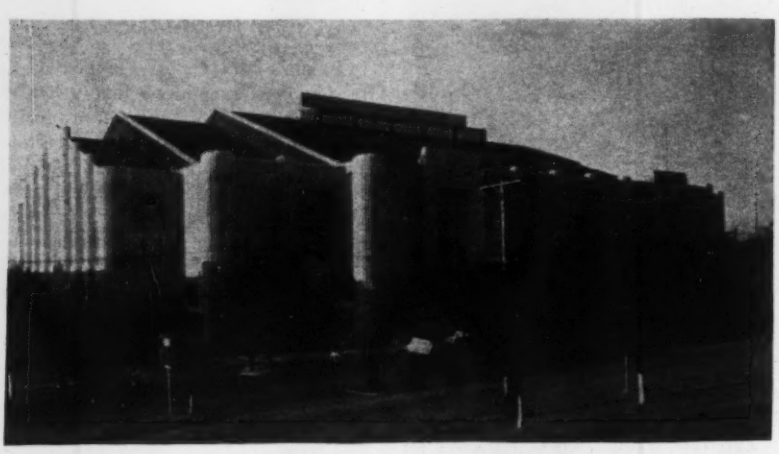
Canada's Minister of Finance, J. L. Ralston, has announced that in order to assist in conserving the nation's financial resources for war uses, certain classes of loans under the National Housing Act will be discontinued after the close of the present year. No loans over $4,000 will be made and no loans of any kind for apartment houses and duplexes. Loans under the housing act now total $46,700,000, one quarter of this amount being used for apartment houses and duplexes.

At the present time no restrictions are being placed on the home improvement loans made by the federal government. These loans now total $38,000,000.

Ralston believes that building activity will not be adversely affected by the new restriction, since he anticipates an increase in industrial construction.

Country's Longest Span Rigid Frame Roof

RODEOS, horse shows, conventions and hockey games are numbered among activities that take place in Indianapolis beneath this long-span rigid frame roof. Lighting, all sources of which are located above bottom girder flanges, provides 40 ft.-candles illumination on a plane 3 ft. above the arena floor.



THIS YEAR'S Indiana State Fair crowds were first to use the new coliseum, which was built to serve as a year-round gathering place for Indiana citizens. In establishing a record for rigid frame building spans this structure surpasses the Pennsylvania Farm Show building at Harrisburg, which has a 235-ft. span.

RIGID FRAME roof spans of the new coliseum on Indiana's state fair grounds are longest by 17 ft. of any in the United States. Eight central frames are 252 ft. long, 4 are 213 ft. and 2 are 187 ft.

The building was started in February and completed in time for the 1939 fair last September. It seats 8,000 outside the main floor, and an additional 5,000 within the arena. Provisions have been made for subsequent addition of two balconies seating 1,000 apiece.

The rigid frames are of plate girder construction; the roof is of precast concrete tile units and lined with 1½-in. of acoustical moulded cork. Permanent seats are installed on a reinforced concrete structure. Outside dimensions are 385 x 252 ft., and maximum height is 106 ft. The arena proper is 120 x 270 ft. and the area which contains brine pipes for freezing skating ice is 100 x 200 ft.

J. L. Simmons was general contractor and Russ and Harrison were architects.

Quarry Blast Staged For Newcomen Group

FEW EYES are quick enough to catch a rock blast, as the camera did in this sequence of views taken at a party staged for the Newcomen Society by Joseph S. Young, president, Lehigh Portland Cement Co., at Allentown, Pa. Traditionally devoted to elaborate dinner meetings at which learned papers on engineering history are read, this British-born American organization saw a far-above average blast, as 86,000 tons of rock were broght down.

The blast which took place in the Lehigh Portland Cement Co.'s Sandt's Eddy quarry, was fired in 27 holes varying in depth from 61 to 106 ft. Twenty of the holes were of the maximum depth mentioned. Holes were 6 in. in diameter, drilled to a point 6 ft. below the plane of the quarry floor. Holes were spaced on 14-ft. centers 34 ft. back of the face.

A total of 28,400 lb. of dynamite was used, giving 3 tons of blasted material per lb. of explosive. Primacord was used for detonating in conjunction with 2 blasting caps, and the shot was fired by a hand-blasting machine. It took 4 hours to load the holes.

ALTHOUGH it may look like a row of poplars, it's the beginning of a quarry blast which moved a hillside of rock. There were 27 holes fired, and it looks as if the second from the left was a bit too late to share the camera's attention with its fellows.

HERE IT COMES! 86,000 tons of it. Shot holes were drilled on 14 ft. centers 34 ft. back of the previous face to a level 6 ft. below the quarry floor. Maximum hole depth was 106 ft.

READY FOR THE SHOVEL. New material which the blast laid at the foot of the slope will be shoveled up and taken to a crushing mill, whence it will go into the manufacture of Lehigh portland cement.

LEHIGH'S PRESIDENT, Joseph S. Young, puts his weight on the blasting machine plunger as part of the assembled members of the Newcomen Society watch the spectacle begin.

Sale of Bonds Studied by USHA

Authority must decide per cent of permanent financing bonds to be sold to public

The first permanent financing of U. S. Housing Authority projects will be carried out next month and USHA officials are now trying to decide how much of the bond issues should be offered to the public. Under the law, 10 per cent of the cost of USHA housing projects must be met through borrowing from private investors, but USHA officials expect that within six months or a year nearly all the money will be coming from private sources. The problem now is whether, in the trial of the market afforded by the first small issues, to offer to investors only the required 10 per cent or some larger percentage.

During the construction period, housing projects are financed either through temporary loans by USHA to the local housing authorities or by the short-term private financing initiated a few months ago. When the projects are finished, however, definitive bonds must be issued. These will be serial bonds with terms running from a year to sixty years. The first 10 per cent will all have been retired in about fourteen years.

Local authority bonds

Although these will be bonds of the local authorities, they will have what amounts to a federal guarantee through the requirement that the annual federal subsidies to the local authorities be devoted first to interest and principal of bonds; subsidies amount to about 3 per cent of total project cost. It is thought almost certain that investors will accept interest rates on all but the longest term bonds lower than the 3 per cent which USHA must collect under the law. This opinion is based on preliminary conversations which officials have been having with bond underwriters.

First offering $10,000,000

Whatever portion of the bonds is offered to the public will, except in one or two instances, be sold by competitive bidding, with bidders asked to name interest rates. The first issue next month will be in the neighborhood of $10,000,000 and will probably cover a project in Utica and several small projects in Pennsylvania.

More funds sought

Before the year is over, officials expect, entire issues will be being offered to the public, with bonds of several local authorities consolidated into single large offerings.

Sale of the bonds would be considerably facilitated by passage of the pending bill giving additional money to USHA. A clause in the bill would make the bonds permissible investments for national banks. Even though they look forward to 100 per cent private financing of their projects, USHA officials would be unwilling to see the additional $800,000,000 of lending authorization dropped from the pending bill, leaving only the extra $45,000,000 of annual subsidy.

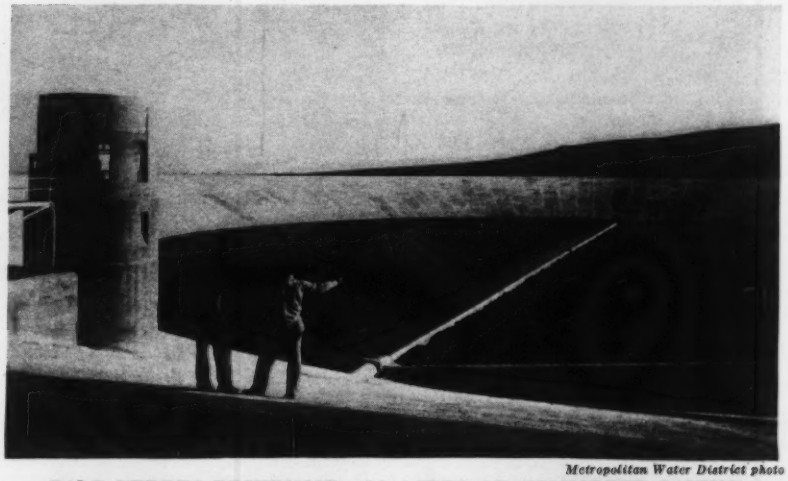
Until the program becomes stabilized, they point out, investors will hesitate to put up part of the money without assurance that the rest will be provided. And even though USHA's lending power functions merely as a revolving fund to protect the projects during construction, it is thought that a $1,600,000 fund would be more commensurate with a program of the present size than half that. The change might be made, of course, as a last-ditch move if the bill encounters too much opposition in the House.

Rio Grande Survey Proposed; Cost, $400,000

The cost of a proposed survey of the Rio Grande from Fort Quitman to the river's mouth, approximately 800 miles as the river flows, is placed at about $400,000, according to the Lower Rio Grande Valley Water Conservation Association. The National Planning Board at Washington, D. C., has been requested to approve the proposed survey.

Oliver C. Aldrich, chairman of the association, states that "such a survey, requiring extended time and a large amount of engineering work, would include a complete history of irrigation along the Rio Grande, a soil analysis and a water analysis."

"The Valley Association is now training all its efforts on water conservation toward a projected diversion works and storage dam up the river from the valley, instead of pressing for an international water treaty between the United States and Mexico to make a dam on the river itself possible. Efforts to obtain the treaty have failed over a long period of years," he explained.



Metropolitan Water District photo

PALO VERDES RESERVOIR—30 ACRES OF SHOTCRETE PAVING

A DISTRIBUTION RESERVOIR to serve Los Angeles, Compton, Torrance and Long Beach in the system being built by the Metropolitan Water District of Southern California, was recently completed in the Palos Verdes Hills some 340 mi. from the intake of the Colorado River Aqueduct. The reservoir is 1,500 ft. long and 1,000 ft. wide; it will have a capacity of 1,000 acre-ft.

The basin it occupies was formed partly by cut and partly by fill: total excavation amounted to 1,500,000 cu.yd. Excavated materials were segregated, about 30,000 cu.yd. of additional material was borrowed, and the entire basin was lined with a blanket of very carefully compacted fines varying in thickness from 3 to 10 ft. This blanket is depended upon for watertightness, but it was covered with a 2-in. layer of shotcrete for protection. The shotcrete, with its wire mesh reinforcing, was put on in strips 30 ft. wide on the sides and 100 ft. wide on the bottom. On the sides of the reservoir the strips were poured alternately and weep holes were put in on 5-ft. contours 30 ft. apart and staggered. Outer portions of the fill are well drained.

The two pipes that bring water into the reservoir discharge well away from the outlet tower to insure circulation. Some water was put in the reservoir, as here shown, for curing purposes; the reservoir will not be in service for another year or until the distribution system is ready to carry water.

Aluminum Company Buys Bonneville Power

The Aluminum Company of America has contracted for 32,500 kw. of Bonneville power for 20 years according to an announcement made Dec. 24 by Roy A. Hunt, president of the company and Bonneville administrator Paul J. Rover. The power contract will amount to about $500,000 annually.

Coincident with announcing the power contract, Hunt stated that his company soon will begin work on a $3,000,000 reduction plant to be built on a 200-acre site two and one-half miles west of Vancouver, Wash. Construction work will be under the direction of the engineering staff of the Aluminum Co., headed by J. P. Growdon, chief hydraulic engineer.

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Proposed $3,000,000 Bridge Approved in Virginia

The Virginia State Highway Commission has approved preliminary plans for constructing a $3,000,000 bridge between Yorktown and Gloucester Point, according to Henry G. Shirley, state highway commissioner. A bill will be introduced in the state legislature for financing the project with bonds.

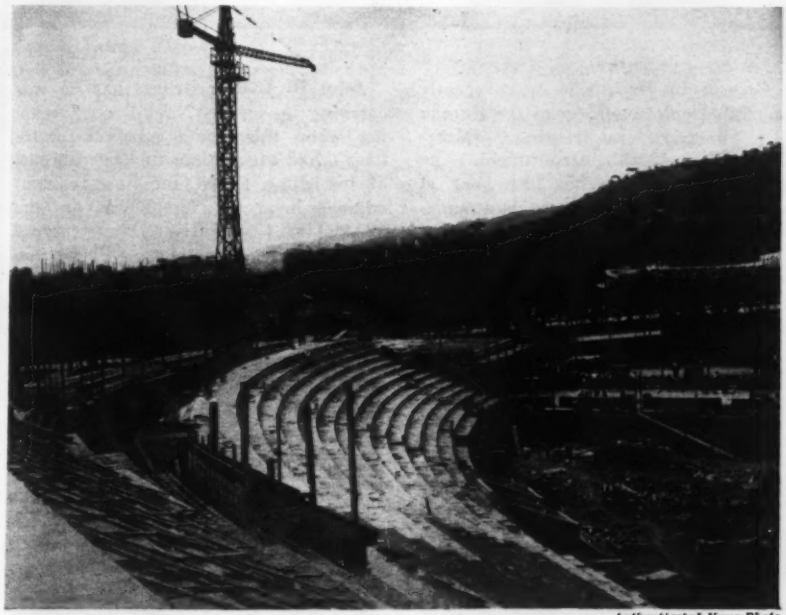
The bridge will be a toll structure and the state highway commission is to have charge if the project is carried out.

BRIEF NEWS

TAXES collected by the Texas state comptroller under the 4-cent gas tax in the past fiscal year totaled $51,575,000, according to the Texas State Highway Department. The records of the distribution of the money show that 42 per cent went to the state highway fund, 21 to the school fund, an equal amount to the county and road district indebtedness, 14 to take care of the total refund claims, 1 per cent for motor fuel law enforcement and the remainder to the general fund.

WHEN LASHED by a 45-mile wind last week, the Lake Washington pontoon bridge now under construction at Seattle moved only 2 inches sideways, according to Charles E. Andrew, chief engineer of the Washington Toll Bridge Authority. "This demonstrates," Andrew stated, "that a 90 mile wind, which is stronger than any ever recorded in Seattle, would result in a movement of only 8 inches."

MEMBERS of the Missouri State Highway Commission have proposed to erect a monument to commemorate Robert E. Lee's civil engineering feat in harnessing the Mississippi River at St. Louis. Backers of the plan have suggested as a site for the monument the Jefferson riverfront memorial.



Authenticated News Photo

ITALY PREPARES FOR 1942 WORLD'S FAIR

SHOWN under construction is an amphitheatre being built in Naples, Italy, to be used in the Triennial Exposition which opens next year and then in the 1942 World's Fair which will be held jointly at Naples, Rome and Florence. The exposition, covering 250 acres and having 54 buildings, will trace the country's colonial progress from early Roman days down to the present.

More Indictments In Building Inquiry

Large corporations, wholesale houses, and individuals named in federal anti-trust suits

Anti-trust charges were returned Dec. 22 against the three largest corporations in the United States dealing in electrical supplies, ten wholesale houses and nineteen individuals by the special federal grand jury investigating price fixing in the building trade at Detroit. A special assistant to the attorney-general explained that the defendants made not less than 75 per cent of the electrical supply sales in the Detroit area.

He stated, "We allege that the defendants conspired to fix, maintain and control an arbitrary, artificial and non-competitive price structure and dictated terms for the sale of electrical supplies. Meetings were held at Detroit hotels. Price lists and discounts were agreed upon and published."

The indictments were the second anti-trust indictments to be presented by the grand jury, the first being those named in the tile industry investigation (*ENR*, Dec. 14, 1939, p. 796).

Companies named in the new indictment include: General Electric Supply Corp., Bridgeport, Conn.; Westinghouse Electric Supply Co., New York City; Graybar Electric Co. Inc., New York City; McNaughton-McKay Electric Co., Detroit; Miller-Seldon Electric Co., Detroit; Splane Electric Supply Co., Detroit; Cadillac Electric Supply Co., Detroit; Crescent Electric Co., Detroit; Fife Electric Supply Co., Detroit; W. J. Hartwig Co., Detroit; Madison Electric Co., Detroit; Turner Electric Supply Co., Detroit, and Henry L. Walker Co., Detroit.

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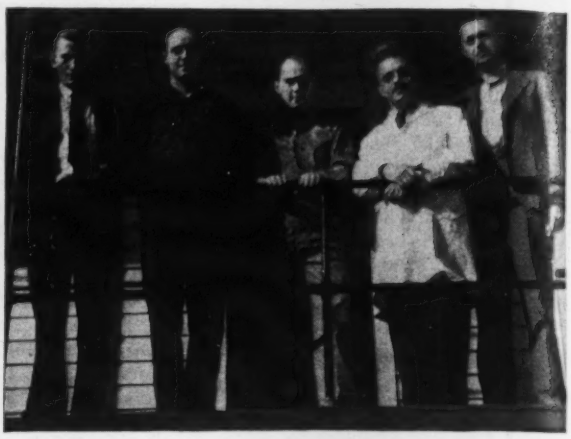
Mississippi Span Seen For Winona, Minn

Plans are being prepared for a $2,000,000 bridge over the Mississippi River at Winona, Minn. The project, which includes the relocation of Highway No. 54 and other work, will be done by the state highway departments of Minnesota and Wisconsin with the aid of federal funds.

If the project is approved by the War Department, construction is expected to start next year. With the proposed plan Wisconsin would relocate Wisconsin Highway No. 54, build an overhead pass over the Burlington R.R. tracks. The bridge itself would be built by the Minnesota State Highway Commission at an estimated cost of $1,500,000.

Andre Faure, planning engineer, and **Stuart M. Weaver,** assistant to the commissioner of public works in Montclair, N. J., look happily forward to the prospect of being pictured in "Men at Work"—at least that's the way the editor would like to have it! Before coming to Montclair in 1937, Weaver was city engineer at Monroe Mich., and also served as field representative for the American Municipal Association. His present activities include public works administration as well as management of the municipal water system. Faure came to Montclair in 1934 having formerly been assistant secretary of the Bridgeport-Fairfield County (Conn.) planning board.



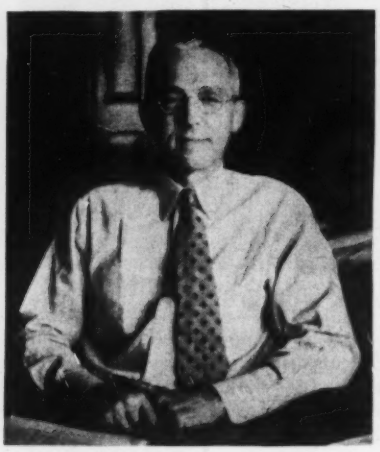
On board the good ship *Kiski*, floating laboratory of the U. S. Public Health Service, we find the staff who are assigned to the Ohio River Pollution Survey. From left to right: **Stanley G. Monroe,** assistant engineer in charge; **F. M. Middleton,** and **F. I. Norris,** laboratory assistants; **Dr. B. S. Levine,** bacteriologist; and **Dr. W. W. Walker,** assistant chemist. The laboratory floats on the stuff it samples, and is completely equipped for making bacteriological, biological and chemical tests of water. Until its conversion to laboratory uses several months ago, the *Kiski* served as a quarterboat for the U. S. Engineer Corps.

MEN AT WORK

Marion L. Crist, engineer of the Little Rock waterworks, where a new record was established recently in laying 9,400 ft. of water main in nine days (*ENR*, Dec. 7, 1939, p. 771). Crist was formerly in the Los Angeles office of Burns & McDonnell, consulting engineers, and he came to Little Rock as resident engineer for that firm during the construction of the new water supply dam and supply line constructed several years ago.

George L. Hall, who was recently appointed chief engineer of the Bureau of Sanitary Engineering, Maryland State Health Department. The promotion came on his 25th year of service with the department, and marks the culmination of consistent advances from his initial assignment as an assistant engineer. One of Mr. Hall's most active projects has been the sealing of abandoned coal mines.

John R. Clarke writes that he was catching up on his News-Record reading when this photo was taken. He hasn't had much time to keep abreast of his game lately, for he's resident engineer-inspector for PWA on the $20,000,000 Grand River Dam structure in Oklahoma. This dam will be the world's longest multiple-arch. Clarke is said to be the only engineer who ever ran for governor of Oklahoma.



MEN AND JOBS

DUANE ORR was recently appointed assistant district engineer of the Nueces County Navigation District at Corpus Christi, Tex. Orr was formerly resident engineer for the Texas State Highway Department at Houston, Tex.

EARL O. MILLS, St. Louis, Mo., has been appointed consulting engineer for the Fort Worth, Tex., zoning commission. In his new work Mills will supervise preparation of a zoning ordinance.

HARRISON V. PITTMAN has been appointed assistant to Capt. D. W. Griffiths, U. S. Engineers, Little Rock, Ark. Capt. Griffiths is operations officer for the Little Rock office.

A. B. DEKAY, contractor at Helena, Montana, has joined the firm of Hugenin & DeKay, architects of Helena and Butte, Mont.

W. S. HOLLOWAY, F. ANASTER and R. O. CHAPPLE are directors of B & H Construction Co., recently chartered at Fort Lauderdale, Fla.

W. WATTERS PAGON, consulting engineer, of Baltimore, Md., has been reemployed by the city of Baltimore as consultant for the municipal airport.

GROVER F. CLEMENTS, division engineer in charge of Division No. 6, Ohio State Highway Department, has tendered his resignation to become director of service for Floyd F. Green, who will become mayor of Columbus, Ohio, on Jan. 1. Clements in 1915 was appointed engineer of Morrow County, Ohio, a position he held until 1919, when he resigned to join the highway department as assistant division engineer. He left the department for a time to work with the Osgood Shovel Co. and to do general contracting. He will be succeeded by J. PERRY SHUMAKER, who once served as city engineer of Xenia, Ohio. Since early this year, Shumaker has been assistant division engineer.

ARCHIE KAAUA, civil engineering graduate of the University of Hawaii, is now serving as the non-partisan member of a three-man civil service commission established to develop civil service lists and ratings in the Territory of Hawaii.

CHARLES L. NOE, former project engineer for the Indiana State Highway Commission, is now engaged as an engineer in the department of water for the City of Toledo, Ohio. In his new work he is one of several engineers engaged on the Lake Erie water supply project.

WILLIAM E. LUCAS, Springfield, Ohio, continues to hold his dual post as engineer and waterworks superintendent for Springfield, following approval of such action by the Clark County common pleas court. The court ruling follows a three-year fight on the part of Lucas to retain his post in the face of ouster action.

HENRY W. BUCK, civil engineer of Hartford, Conn., has been elected secretary of the Hartford Bridge Commission to succeed ROBERT D. OLMSTED. Olmsted is to continue as treasurer of the commission, which is in charge of plans for the proposed $5,000,000 toll bridge across the Connecticut River between Hartford and East Hartford.

HARRY J. DONAHUE, senior partner in the contracting firm of Donahue Bros., Middletown, Conn., has been named superintendent of the Mt. Higby reservoir at Middletown. He succeeds WILLIAM J. ACKERMAN.

AUBREY D. YOUNG, Schaefferstown, Pa., has been named bridge designer and BUDD G. BEALOR, Aspinwall, Pa., engineer with the Pennsylvania State Highway Department.

LIEUT. WILLIAM A. ZOBEL, Civil Engineering Corps, U. S. Naval Reserves, is now a resident officer in charge of the Naval Air Station at Tongue Point, Astoria, Ore. Zobel's numerous positions before going to Astoria include: instructor in the civil engineering department at The Citadel, Charleston, S. C.; assistant to resident engineer on construction, Waddell & Hardesty, New York City; bridge designer with the Louisiana State Highway Commission; chief of party and traverse computer for the U. S. Geological Survey; assistant structural engineer of the TVA, and assistant engineer on bridge design with the TVA.

DONALD T. HENON, Philadelphia, and HARVEY D. HERBERT, Center Square, are new additions to the engineering staff of the Pennsylvania General State Authority.

FRED J. HERRING, Little Rock, Ark.; I. W. BROWN, Jackson, Miss.; H. A. FLANAKIN, Baton Rouge, La.; G. G. EDWARDS, Austin, Tex.; DON H. JONES, Oklahoma City, Okla.; J. H. LONG, Jefferson City, Missouri, and T. McEWEN, Nashville, Tenn., represented their state highway departments at a regional planning conference held recently in Little Rock, Ark.

JOSEPH P. SULLIVAN, acting building commissioner of the Board of Education at St. Louis, has been named commissioner for a four-year-term. Sullivan has been acting commissioner since the death of the late GEORGE W. SANGER, JOHN A. FLEISCHLI is chairman of the building committee.

A. H. CUNNINGHAM of Storm Lake, Iowa, has been appointed engineer for Buena Vista County, Iowa.

J. P. SODERSTROM, who recently retired as city manager of Grand Junction, Colo., has been named engineer of Mesa County, Colo., with headquarters at Grand Junction.

JOHN W. COOK, JR., city engineer of Fulton, Mo., who resigned a year ago to take charge of several WPA projects in northwest Missouri, has gone to St. Louis to join the engineering staff of the Russell Engineering Co., St. Louis, Mo.

WILLIAM KANTOLA has been appointed city engineer of Ashtabula, Ohio.

CHARLES ASH, chief engineer of the Lima district of the Ohio State Highway Department, has been named assistant city engineer at Lima, Ohio.

CASSIUS HUGHES, a WPA area engineer stationed at Rhinelander, Wis., has been elected road commissioner of Florence County, Wis., to succeed JAMES ROACH of Commonwealth.

A. T. HARTMAN, superintendent in charge of the War Department's repair station at the mouth of the Muskingum River, Marietta, Ohio, has been appointed chief of the construction section for the Huntington, W. Va. district, U. S. Engineers. Hartman is succeeded at Marietta by GRAHAM THOMAS, formerly assistant to the chief of construction at the Huntington office.

SYDNEY W. MARKOFF, civil engineer with the bridge section of Rhode Island's department of public works, has been appointed a member of the inspection staff at Knightville Dam, a Massachusetts flood control project under the supervision of the Providence district of the U. S. Engineers.

HENRY C. LAUB resigned recently as engineer of Cass County, Iowa. Laub, whose resignation is effective Dec. 31, has not made known his plans for the future.

MEETINGS

AMERICAN SHORE AND BEACH PRESERVATION ASSOCIATION, annual meeting, Hotel Carlton, Washington, D. C., Jan. 10.

NATIONAL AIR CONDITIONING ASSOCIATION, first annual convention, Hotel Stevens, Chicago, Ill., Jan. 15-17.

AMERICAN INSTITUTE OF CONSULTING ENGINEERS, annual meeting, New York City, Jan. 15.

NATIONAL SAND AND GRAVEL ASSOCIATION, annual convention, Hotel Jefferson, St. Louis, Mo., Jan. 17–19. Concurrently, tenth annual convention of the National Ready-Mix Concrete Association.

CANADIAN CONSTRUCTION ASSOCIATION, Royal York Hotel, Toronto, Ont., Jan. 16-17.

AMERICAN SOCIETY OF CIVIL ENGINEERS, annual meeting, New York City, Jan. 17-19.

AMERICAN SOCIETY OF PLANNING OFFICIALS, Chicago, Ill., January 18-19.

NATIONAL CRUSHED STONE ASSOCIATION, Hotel Jefferson, St. Louis, Mo. Jan. 22-24.

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS, Cincinnati, Ohio, Jan. 25-27.

NATIONAL PUBLIC HOUSING CONFERENCE, Washington, D. C., Jan. 26-28.

AMERICAN ROAD BUILDERS ASSOCIATION, Chicago, Jan. 29-Feb. 2.

NATIONAL PAVING BRICK ASSOCIATION, annual meeting, Congress Hotel, Chicago, Ill., Jan. 30-31.

ASSOCIATED GENERAL CONTRACTORS, National Convention, Peabody Hotel, Memphis, Tenn., Feb. 5-8.

REGIONAL AND LOCAL

ASSOCIATED GENERAL CONTRACTORS: North Dakota Section, Grand Forks, N. D., Jan. 6. Central Branch, Des Moines, Iowa, Jan. 10-11. Missouri Section, Kansas City, Mo., Jan. 18-19.

COUNTY COMMISSIONERS ASSOCIATION OF NORTH DAKOTA, annual convention, Bismarck, Jan. 9-11.

KANSAS CONTRACTORS ASSOCIATION, Kansas City, Mo., Jan. 11-12.

LOUISIANA ENGINEERING SOCIETY, fifth annual meeting, St. Charles Hotel, New Orleans, Jan. 12-13.

COLORADO ASSOCIATION OF HIGHWAY CONTRACTORS, annual meeting, Denver, Colo., Jan. 13.

ENGINEERING CONGRESS, University of Colorado, Boulder, Colo., Jan. 18-19.

ANNUAL ENGINEERS INSTITUTE, North Carolina State College, Raleigh, N. C., Jan. 24-27.

ILLINOIS SOCIETY OF ENGINEERS, Rockford, Ill., Jan. 25-27.

NORTH CAROLINA SOCIETY OF ENGINEERS, annual meeting, Raleigh, Jan. 26.

AMERICAN SOCIETY OF CIVIL ENGINEERS, North Carolina Section, Raleigh, Jan. 27.

WYOMING ENGINEERING SOCIETY, 1940 Convention, Laramie, Feb. 2-3.

ELECTIONS AND MEETINGS

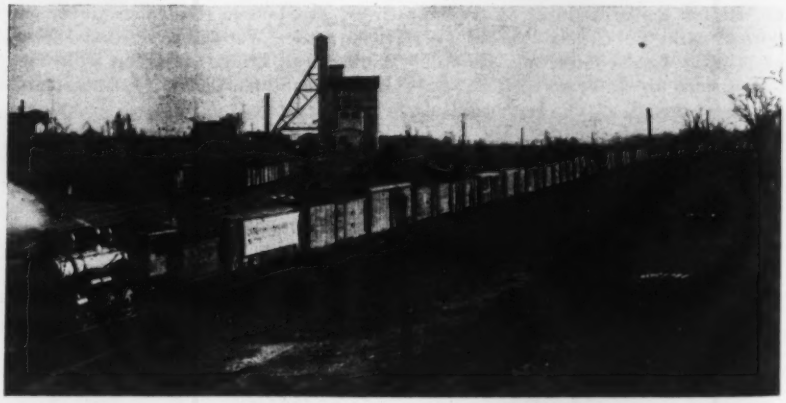
WHEN the Topeka, Kan., Engineers' Club held its annual election at the Dec. 5 meeting, D. F. Joslin was elected president. Other new officers are: E. S. Elcock, first vice-president; G. F. Selby, second vice-president; A. G. Aldridge, treasurer; C. Frank Virr, secretary, and Zint Wyant, assistant secretary. Harold Elwood was the principal speaker at the meeting.

ARNDT J. DUVAL, St. Paul, was elected president of the Northwest section, American Society of Civil Engineers, at the annual meeting held recently in St. Paul. He succeeds H. S. Loeffler, St. Paul. Other officers are: William J. Titus, Minneapolis, first vice-president; Louis Yager, St. Paul, second vice-president, and Frank S. Altman, Minneapolis, secretary-treasurer. A. E. Palen, St. Paul district engineer, Public Roads Administration, as the principal, discussed the five-point plan for a regional highway system. Palen pointed out that the proposal for six continental "super highways" had been abandoned in favor of a more practical program of improving main regional traffic arteries.

WARREN WHITE, Richmond, Va., industrial agent of the Seaboard Air Line Railway, addressed the Raleigh, N. C., Engineers Club at its Dec. 11 meeting. Paul Lyman and A. M. McCabe were in charge of the program.

ROY A. PALMER, Duke Power Co., was elected president of the Charlotte, N. C., Engineers Club at its recent meeting. He succeeds Maurice G. Townsend. Other new officers are: George O. Bason, vice-president; W. B. White, secretary; and C. N. Underwood, re-elected treasurer. The new board of directors is composed of Townsend, H. H. Hill, Channing B. Brown, W. W. Hanks and Edward W. Clark. Hunter B. Blakely, president of Queens College, was the principal speaker. The club plans to hold its annual banquet Jan. 11, and James Lincoln, president, Lincoln Electrical Co., Cleveland, Ohio, will be the principal speaker.

THE MIDWESTERN PENNSYLVANIA SOCIETY of Professional Engineers at their meeting early this month at Slippery Rock, Pa., elected S. J. Taylor, Slippery Rock, president for the coming year. Harry W. Claybaugh of Franklin was chosen vice-president; Frank Clepper of Sharon, secretary-treasurer; Frank R. Laying of Greenville, state director; and Thomas C. Frame of Harrisburg, chapter director.



SALT FOR WINTER USE ON HIGHWAYS

A TRAIN loaded with 2¼ million pounds of rock salt for winter use on the highways of Maine and New York is shown leaving Retsof, N. Y. The salt was being shipped by the International Salt Co.

OBITUARY

NELS B. LUND, engineer with the development department of the Dorr Co., Inc., died in Seaford, L. I., N. Y., Dec. 20. Lund obtained his engineering education at Cooper Union and at Columbia University and joined the Dorr Company in 1924.

JEROME F. CERMAK, 55, for 25 years in the construction division of the city engineer's office in Chicago, died in that city Dec. 18. Cermak, who graduated from the University of Illinois in 1907, at the time of his death was resident engineer in charge of the construction of tunnels to connect the South District Filtration Plant with the 68th St. tunnels.

ALBERT C. MARTENS, superintendent of the Abell-Howe Construction Co., Chicago, was killed Dec. 18 on a construction project at Cedar Rapids, Iowa. Martens, a graduate of the University of Michigan, had been with the company for more than 15 years.

GEORGE J. LYON, civil engineer for the National Board of Fire Underwriters, New York City, died Dec. 17 in Parkersburg, W. Va. Lyon, who held engineering degrees from the University of Nebraska and Columbia University, began his engineering work in 1899. From 1904 to 1910 he was professor of civil engineering at Colorado College, Colorado Springs, and from 1910 to 1917 he held the same position at Union College, Schenectady, N. Y.

RALPH E. GOODWIN, 53, civil engineering professor in the School of Technology, College of the City of New York, died Dec. 16. Goodwin held three degrees from Yale University and taught at that school from 1909 to 1912. In 1922 he went to the College of the City of New York after ten years in general engineering work.

LESTER F. JORDAN, 59, president of the Sanitary Service Co., Kansas City, died in that city Dec. 15. Jordan and the late Paul Patton built the garbage disposal system at Kansas City.

ARTHUR E. HODGINS, 78, pioneer Canadian railroad builder, died in Victoria, British Columbia, Dec. 18. Hodgins was a graduate of the Royal Military College at Kingston. He joined the construction staff of the old Grand Trunk Pacific Ry. upon returning from the Boer War in South Africa and retired in 1909.

ANTHONY J. DOWNS, president of the Lathrop & Shea Contracting Co., died in New Haven, Conn., Dec. 21 at the age of 68. Under Downs' supervision many New England bridges and public buildings were erected.

WILLIAM F. MILLER, 59, assistant to the regional chief engineer for the Eastern Division of the Pennsylvania R. R., died in Ardmore, Pa., Dec. 18. Miller joined the Pennsylvania in 1892 and spent ten years as engineer maintenance of way of the Eastern Division with headquarters at Harrisburg.

Other recent deaths include: EMMET GRIGGS, highway superintendent for Harding County, S. D., Buffalo, S. D.; GEORGE L. BROWN, 57, since 1915 superintendent of highways for Orangetown, N. Y., Blaunelt, N. Y.; WILLIAM E. PARSON, 67, builder, New Haven, Conn.; ARTHUR J. SHOLES, 82, retired builder, Tucson, Ariz.; EDWARD CAMPBELL, 65, civil engineer, Elizabeth, N. J.; WILLIAM GROTE, 48, builder of Wood River, Ill., St. Louis, Mo.; EUGENE SHAW, 52, engineer of the Bucyrus, Ohio, waterworks for the past 25 years, Bucyrus, Ohio.

CONTRACTS AND CAPITAL

ENGINEERING construction awards for the short week due to the Christmas day holiday total $44,728,000, a decrease of 25 per cent from the volume for the corresponding 1938 week.

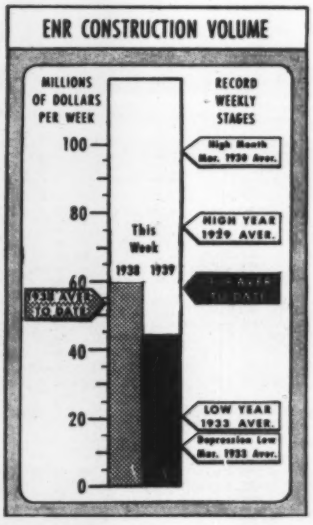
The current week's total brings 1939 construction volume to $3,002,856,000, an increase of 8 per cent over the $2,791,931,000 reported for the 52-week period last year. Of this total, $890,707,000 is private, 11 per cent higher than a year ago; and $2,112,149,000 is public, 6 per cent above 1938.

Private awards for the week are 24 per cent higher than in the 1938 week, but public construction is 37 per cent lower.

In the classified construction groups, gains over the week last year are in commercial building and large-scale private housing, and unclassified construction. Gains over the preceding week are recorded in waterworks, bridges, industrial buildings, commercial buildings, public buildings and unclassified construction.

New capital for construction purposes for the week totals $9,892,000, a drop of 60 per cent from the volume a year ago. The current week's new financing is made up of $9,338,000 in state and municipal bonds, $394,000 in corporate security issues, and $160,000 in RFC loans for public improvements.

New construction financing for the year 1939 totals $2,404,774,000, a decrease of 35 per cent from the $3,704,201,000 volume for the year 1938.



CONTRACTS

(Thousands of dollars)

	Week Ending Dec. 29 1938	Dec. 21 1939	Dec. 28 1939
Federal	$ 3,559	$8,867	$4,656
State & Municipal	44,007	30,089	25,294
Total public	$47,566	$38,956	$29,950
Total private	11,944	8,746	14,778
TOTALS	$59,510	$47,702	$44,728
Cumulative 1939 (52 weeks)			$3,002,856
1938 (52 weeks)			$2,791,931

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial building, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1938 52 Wk.	1939 52 Wk.
NON-FEDERAL	$2,560,506	$1,276,746
Corp. securities	376,845	214,197
State & Mun.	757,460	568,978
R.E.A. loans	76,106	89,445
R.F.C. loans	104,344	—1,685
P.W.A. allot.	723,265	.....
U.S.H.A. loans	320,986	215,811
Fed. Aid—Hwys.	201,500	190,000
FEDERAL	$1,143,695	$1,128,028
TOTAL CAPITAL	$3,704,201	$2,404,774

FHA MORTGAGES

	Week Ending Dec. 24 1938	Dec. 16 1939	Dec. 23 1939
Selected for appraisal	$18,298	$17,900	$ .....*
Cumulative 1939 (51 weeks)			$.....*
1938 (52 weeks)			$1,005,902

* Subject to revision.

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	Dec., '39	238.17	114.49
Building Cost	Dec., '39	201.21	108.77
Volume	Nov., '39	219	96

CONTRACT UNIT PRICES

What contractors are bidding on different kinds of construction work

WATER SYSTEM
WASHINGTON

OWNER: City of Sunnyside, Washington. G. D. Hall, Yakima, Washington, engineer.

PROJECT: Constructing domestic water system in Sunnyside, Yakima County, Wash. Involves two 750,000 gallon covered concrete reservoirs; laying 7,500 ft. of 6 to 12-in. pipe; and drilling two 210-ft. wells.

CONDITIONS: Reservoirs to be completed in six months. Other work to be finished in 90 days. Rail and highway facilities for transportation available. Contractor to furnish all material. Concrete pouring halted by winter weather, to be resumed in spring. Wage rates on project are: skilled, $1.50 per hr.; semi-skilled, $1.25; and common, 70c. per hr.

BIDS: Eleven bids were received for reservoir construction (Schedule I) October 27, 1939. They ranged from contract low of $39,833 to $58,380. Nine bids received October 27, for pipe laying (Schedule II) ranging from contract low of $19,100 to $25,664. Four bids opened same date for drilling wells (Schedule III), ranging from $4,825 to 8,839.

SCHEDULE I—RESERVOIRS

LOW BIDDERS:

1. Superior Constr. Co., Seattle, Wash. (contract) $39,833
2. L. B. James, Portland, Ore. 42,463
3. H. J. Adler, Yakima, Wash. 43,520

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Uncl. excav. and backfill	2,400 c. y.	$1.00	$1.70	$1.50
2. Gravel backfill	150 c. y.	1.50	2.20	2.00
3. Borrow, to 1 mi. haul	1,200 c. y.	.75	.42	.30
4. Borrow, overhaul	1,200 y. mi.	.08	.105	.10
5. Concrete	1,260 c. y.	16.90	17.80	19.50
6. Reinforcing steel	140,000 lb.	.06	.06	.05
7. Copper diaphragms	2,200 l. f.	.40	1.10	.90
8. Str. steel, incl. ftgs	8,000 lb.	.22	.12	.15
9. 4-in. S and Y flanged valves	2 ea.	27.00	20.00	25.00
10. 16-in. S and Y flanged valves	2 ea.	210.00	142.80	200.00
11. 16-in. N.R.S. H.E. valves	1 ea.	195.00	148.00	200.00
12. 4-in. Class 100 c.i. or std. wrt. steel	20 l. f.	.60	2.00	1.00
13. 12-in. Class 100 c.i. pipe, drain	10 l. f.	3.95	3.00	3.00
14. 16-in. Class 100 c.i. or steel pipe	480 l. f.	4.25	3.67	4.00
15. 12-in. concrete pipe	250 l. f.	1.30	.55	.80
16. 4-in. Dresser or Dayton couplings	1 ea.	2.50	4.00	10.00
17. 16-in. Dresser or Dayton couplings	4 ea.	15.00	13.40	40.00
18. Fence	880 l. f.	.75	.75	1.50
19. Rubble masonry (dry wall)	10 c. y.	7.00	5.50	8.00

SCHEDULE II—PIPE LAYING

LOW BIDDERS:

1. J. M. DeBlasio, Yakima, Wash. (contract) $19,100
2. Ernest Stettler, Logan, Utah 20,240
3. Superior Constr. Co., Seattle, Wash. 20,878

Item	Quan.	Unit Prices (1)	(2)	(3)
1. 6-in. Cl. 150 pipe	1,600 l. f.	$1.20	$1.24	$1.26
2. 8-in. Cl. 150 pipe	2,800 l. f.	1.80	1.72	1.79
3. 10-in. Cl. 150 pipe	700 l. f.	2.30	2.22	2.65
4. 12-in. Cl. 100 pipe	2,400 l. f.	2.60	2.61	2.70
5. 4-in. Cl. B valves and boxes	2 ea.	20.00	20.00	20.00
6. 6-in. Cl. B valves and boxes	14 ea.	30.00	30.00	28.00
7. 8-in. Cl. B valves and boxes	24 ea.	40.00	40.00	40.00
8. 10-in. Cl. B valves and boxes	4 ea.	60.00	62.50	70.00
9. 12-in. Cl. B valves and boxes	6 ea.	80.00	79.50	80.00
10. Extra excavation	150 c. y.	1.00	1.50	1.50
11. Rock excavation	300 c. y.	2.00	4.00	2.50
12. 12-in. concrete pipe	1,000 l. f.	.60	.85	.98
13. 10-in. concrete pipe	1,600 l. f.	.50	.75	.88

SCHEDULE III—DRILLING WELLS

LOW BIDDERS:

1. A. A. Durand & Son, Walla Walla, Wash. (contract) $4,825
2. J. W. Ludwig, Granger, Wash. 5,489
3. N. C. Jannsen Drilling Co., Seattle, Wash. 7,236

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Drilling to accomodate 15-in. casing	210 l. f.	$6.00	$8.00	$7.50
2. Drilling to accomodate 12-in. casing	210 l. f.	5.00	6.00	6.75
3. Under-reaming (alt.)	100 l. f.	3.00	5.00	24.00
4. Gravel (alt.)	20 c. y.	4.00	5.00	2.00
5. Perforating	200 l. f.	1.00	1.00	.75
6. Furnish and inst. 15-in. casing	210 l. f.	4.50	3.65	3.15
7. Furnish and inst. 12-in. casing	210 l. f.	3.00	3.25	2.82
8. Well tests	2 ea.	180.00	150.00	200.00

HIGHWAYS, MISSOURI

OWNER: Missouri State Highway Commission, Jefferson City, Mo., C. W. Brown, Chief Engineer.

PROJECT: Grading, constructing culverts, bridging, and concrete pavement for 3.861 miles of 20-ft.-wide surfaced road in Vernon County, Missouri.

CONDITIONS: Contractor to furnish all materials and complete work in 210 working days. Rail and highway transportation facilities available. Wage rates are: skilled, 60c. per hr.; semi-skilled, 40c.; and common, 30c. per hr.

BIDS: Nine bids were received August 11, 1939, ranging from the contract low of $145,045 to $205,323.

LOW BIDDERS:

1. Koss Constr. Co., Des Moines, Ia. (contract) $145,045
2. Harrison Engr. & Constr. Co., Kansas City, Mo. 152,326
3. Imperial Constr. Co., Leavenworth, Kan. 154,174

ROADWORK

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Remove hedges	4.6 hund. f.	$10.00	$10.00	$7.00
2. Unclass. excavation	107,483 c. y.	.22	.23	.16
3. Cl 3 excav. structures	779 c. y.	1.50	1.20	1.20
4. Compact. embank. (rolling)	84,444 c. y.	.03	.025	.04
5. Overhaul	46,649 sta. y.	.02	.01	.02
6. Broken stone	4,763 c. y.	2.65	2.60	2.50
7. Screenings	2,136 ton	1.70	1.70	2.00
8. Water	15,200 hund. gal.	.01	.02	.....
9. Chat or cr. stone surf	337 c. y.	2.00	2.50	2.00
10. P.C.C. pavmt., non-reinf	45,240.5 s. y.	1.65	1.83	2.00
11. Cl. B conc., box culv	287.2 c. y.	24.00	22.00	22.50
12. Spec. conc. protect. in gr. C	56.1 c. y.	.01	.....	.01
13. 15-in. corr. met. culv. pipe	8 l. f.	1.40	1.25	1.50
14. 18-in. corr. met. culv. pipe	72 l. f.	1.60	1.50	1.75
15. 30-in. corr. met. culv. pipe	32 l. f.	2.50	3.00	3.00
16. 15-in. culvert pipe	444 l. f.	1.60	1.25	1.50
17. 18-in. culvert pipe	136 l. f.	1.80	1.50	1.75
18. 24-in culvert pipe	36 l. f.	2.00	2.00	2.50
19. Relaid pipe culverts	234 l. f.	1.00	1.00	1.00
20. Reinforcing steel	31,120 lb.	.045	.05	.045
21. Grout light stone revetment	10 s. y.	5.00	3.00	3.00
22. 12-in. cobblestone gutter	85 l. f.	1.50	1.50	2.00
23. Barricades	7 ea.	35.00	35.00	40.00
24 Relocating barricades	3 ea.	15.00	20.00	15.00
25. Subdrains	720 l. f.	1.00	1.00	.75

BRIDGE — STATION 563+21.38

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Cl. 1 excav., structures	60 c. y.	$1.20	$1.20	$1.20
2. Cl. B conc., handrail	14.9 c. y.	45.00	45.00	45.00
3. Cl. B conc., superstr., except handrail	58.7 c. y.	23.50	22.50	22.50
4. Cl. B conc., substr., except handrail	69.2 c. y.	29.00	28.00	30.00
5. Spec. conc. protect. in gr. A	14.9 c. y.	.01	.....	.....
6. Spec. conc. protect. in gr. B	58.7 c. y.	.01	.....	.....
7. Spec. conc. protect. in gr. C	69.2 c. y.	.01	.....	.....
8. Fabr. struct. steel	50,200 lb.	.062	.062	.062
9. Steel castings	2,680 lb.	.20	.20	.20
10. Reinforcing steel	15,860 lb.	.042	.042	.042
11. Temporary bridges	70 l. f.	6.00	6.00	6.00
12. Removing exist. struct. (superstr. only)	L.S.	500.00	500.00	500.00
13. Special work	L.S.	240.00	240.00	240.00

BRIDGE — STATION 666+19.69

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Cl 1 excav., struct	320 c. y.	$1.20	$1.20	$1.20
2. Class B concrete	153.5 c. y.	22.50	21.50	22.00
3. Spec. conc. protect. in gr. C	153.5 c. y.	.01	.....	.....
4. Reinforcing steel	11,420 lb.	.042	.042	.042
5. Special work	L.S.	120.00	120.00	120.00

CONSTRUCTION REPORTS

Compiled by BUSINESS NEWS DEPARTMENT
Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, MANAGER
(Daily service also available—Write for details)

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

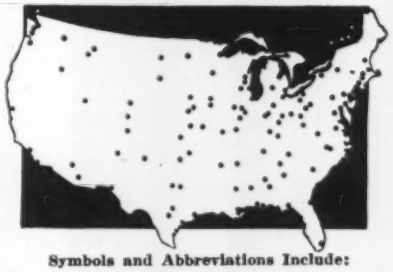
Classes of Construction
(Named in order of Listing)

Water Supply	Unclassified
Sewers, Waste Disposal	Materials, Equipment
Bridges, Grade Cross'gs	Public Buildings
Streets & Roads	Commercial Buildings
Earthwork, Waterways	Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads); BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR); LOW BIDDERS ($500,000 projects and over); CONTRACTS AWARDED

Location of ENR Correspondents



Symbols and Abbreviations Include:

†	Federal Government
★	Project of $500,000 or over
ENR	Engineering News-Record
CD	McGraw-Hill Construction Daily

WATER SUPPLY

BIDS ASKED

Bids Asked January 23

La., Thibodaux—At office C. E. Delas, mayor, WW imprvs., 13 mi. raw water supply line from Mississippi River, to here, elevated storage tank, etc. J. B. McCrary Co., Inc., 22 Marietta St. Bl., Atlanta, Ga., engrs.

Bids Asked about February 1

Wis., Granton—Elevated water storage tank. General Eng. Co., Portage, engrs.

Wis., Pardeeville—Elevated water storage tank. General Eng. Co., Portage, engrs.

CONTRACTS AWARDED

Calif., Rio Vista—620 ft. 24 in. concrete watermains, alley bounded by 3, 4, Main and Logan Sts., to Splekerman Concrete Pipe Co., P. O. Box 477, Lodi. **$830.** CD 12/11—ENR 12/14.

Conn., New Britain—M. W. Bannan, chn. Bd. Water Comrs., diesel engine generating plant, pumps, motors, engine, electrical equip., appurtenances for filtration plant, to Fairbanks Morse Co., 160 Varick St., New York. **$46,395. PWA.** Bids 11/29. CD 11/17—ENR 11/23.

†Fla., Pensacola—P. Wks. Officer, Naval Air Base, Pensacola, pumphouse, pump wells, Spec. 9469, to J. B. McCrary Co., 22 Marietta St., Atlanta, Ga. **$43,000.** Bids 12/13. CD 11/21—ENR 11/30.

Mich., Wahjamega—A. N. Languis, dir. State Administrative Bd., Lansing, imprv. water supply at Caro State Hospital for Epileptics, to L. W. Wells Constr. Co., 726 Niagara St., Saginaw, **$9,305.** Bids 12/4. CD 11/22.

Neb., Burchard—Stand-pipe for WW, to Drake, Williams & Mount, 23 and Hickory Sts., Omaha, **$3,600*****transite pipe and specials, to Johns-Manville Sales Corp., 918 Farnam St., Omaha. **$5,375*****hydrants, to Iowa Valve Co., 812 Hubbell Bldg., Des Moines, Ia. **$296*****meters and material for house service connections, to Capitol Supply Co., 401 N. 9 St., Lincoln. **$352** and **$360** respectively***well and pump, to Layne Western Co., World Herald Bldg., Omaha. **$1,967*****fire hose and clay pipes, to Eureka Fire Hose Div. 13 St. and Capitol Ave. **$454.** Grand total $12,404. **WPA.** Bids 12/13. CD 11/27—ENR 11/30.

★**N. J., Atlantic City**—Water filtration plant at city pump. station, **WPA. $911,724.** CD 11/3—ENR 11/10.

N. Y., Frewsburg—Carroll Town Bd., Frewsburg, water supply and distr. sys. **WPA.** Est. **$110,000.** W. S. Lozier, Inc., 10 Gibbs St., Rochester, engrs. CD 12/11—ENR 12/14.

N. C., Lenoir—E. H. Tate, mayor, exten. water lines along Hy. 18, **WPA. $24,233.** M. M. Williams, city engr.

O., Kent—Contr. 2, southwesterly watermains together with appurtenances, to F. Procopio, 607 Copley Rd., Akron. **$15,760.** Bids 11/28. CD 11/24—ENR 11/30.

★**O., Toledo**—W W Filtration Plants, Divs. L & P, to J. A. Utley, Royal Oak, Mich. **$1,571,718*****Divs. M and N to Pitt Constr. Co., 1235 Washington Blvd., Pittsburgh, Pa. **$419,887*****Div. O, to Romanoff Electric Co., 105 Bway., **$50,580.** Grand Total $2,042,185. Bids 12/6. CD 12/7—ENR 12/14.

Tex., Electra—A. B. Corder, mayor, WW sys. imprvs., pipe line extens., pumping unit, valves, fittings, to Eugene Ashe Electric Co., 505 Jones St., Fort Worth. **$11,045.** Bids 12/7. CD 11/28—ENR 11/30.

Tex., League City—Galveston Co. Water Conservation Dist. 2, League City, installing WW sys., **WPA $26,984.**

Wis., Baraboo—Div. 1, furnishing, installing deep well turbine pump, to Aurora Pump Co., Aurora, Ill., **$1,550;** Div. 2, pipe lines, and Div. 3, reservoir, to L. C. Welch, Baraboo, **$2,924** and **$5,990** respectively. Grand total $10,464. Bids 12/11. CD 12/6.

Wis., Stoddard—WW sys., **WPA, $36,000.** F. J. Davy & Son, LaCrosse, engrs.

SEWERS, WASTE DISPOSAL

BIDS ASKED

Bids Asked January 4

Ill., Chicago—Sanitary Dist. of Chicago, 910 South Michigan Ave. West Side Intercepting Sewer. Contr. 1A. R. A. Woodhull, chn. Com. on Finance; adv. ENR 12/28.

Bids Asked January 5

N. C., Siler City—O. B. Reitzel, mayor, clarifiers for 2 settling tanks, mechanical equip. for removing sand and sludge from grit chamber, 50 gpm secondary sewerage pump, c.i. pipe and fittings, gate valves, sand, cement, etc. Lindberg Engineers, Burlington, engrs.

CONTRACTS AWARDED

Conn., New London—T. Fitch, purch. agt., City Hall, sewage treatment plant, Contr. 5, plumbing to M. Mallove, 33 Tilley St., **$5,512*****Contr. 6, heating, ventilating to P. G. Mono Co., Inc., 590 Bank St., **$9,000*****Contr. 7, air compressor sys., to Geo. Allen & Son, 205 E. 85 St., New York, **$2,493*****Contr. 8, sludge cake conveyor, to W. J. Donovan, 180 Harrison St., Boston, Mass., **$2,577.** Grand total $19,582. Est. $25,000. Bids 12/18. CD 12/15—ENR 11/30.

Ill., Manteno—State, new laboratory addn. and alterations at sewage disposal plant, Manteno State Hospital, to C. B. Johnson & Sons, 6 N. Michigan Ave., Chicago. **$74,778.** C. H. Hammond, Springfield, archt.

Ind., Greenfield—Storm sewers, **WPA. $46,000** allot.

Ind., Newcastle—Exten. storm sewers, **WPA. $33,000** allot.

Ky., Paris—G. L. Doyle, mayor, additional sanitary and storm sewers and repairs to present lines. **WPA. $37,553** allot.

N. J., Atlantic City—Excavating, imprv. sanitary sewerage sys. various streets, **WPA $49,285,** G. R. Swinton, 930 Atlantic Ave. WPA and owners, engrs.

N. Y., Oneida and **Grand View**—Towns, sanitary sewers, storm drains, catch basins, replacement of paving, **WPA. $25,000.**

N. Y., Rochester—Dpt. P. Wks., City Hall, storm sewer in Ross St. and combined sewers in Ripley St., Curren Pl. and Parsells Ave. **WPA.** Over **$25,000.**

Pa., New Eagle—Boro, P. E. Berry, secy., 23 Main St., 13 manholes, 14 lampholes, pipe, sewer joint seal for sanitary and storm sewer, **WPA.** Total est. **$75,000.** Bids 11/10. CD 10/19—ENR 10/26.

Pa., Phila.—Philadelphia Housing Auth., 21 St. and Parkway, laying sewers in streets in Glenwood Ave. housing project, 27 and Berks Sts., to M. Massey, 3613 N. 8 St. **$12,054.** Bids 10/27. CD 10/25.

Tex., Houston—Rein.-con. structures and appurtenances at Southside sewage treatment plant, to H. E. Cagle, 2410 McDuffie St. **$41,000.** Bids 11/29. CD 11/16.

BRIDGES, GRADE CROSSINGS

BIDS ASKED

Bids Asked January 5

Pennsylvania—State Hy. Dpt., I. L. Hughes, secy., North Office Bldg., Harrisburg, rein.-con. bridge, rein.-con. paving, 11,509 ft. Route R-200, Sect. 4, Pittsfield Twp., Warren Co.; plate girder bridge, grading, drainage, 1,176 ft. Route R-49029, Sect. 1, Rockefeller Twp., Northumberland Co.; rein.-con. bridge bituminous on native stone or crushed aggregate surfacing 725 ft. Route R-49010, Sect. 1, Washington Twp., Northumberland Co.; reconstructing existing bridge floor, bituminous on concrete surfacing 4778 ft. Route R-146, Sect. 7, Norristown Boro, Montgomery Co.; rein.-con. bridge, grading, drainage, shoulder grading, 1,937 ft. Route R-41051, Sect. 3, Plunketts Creek Twp., Lycoming Co.; I-beam bridge, grading, drainage 995 ft. Route R-38049, Bethel Twp., Lebanon Co.; 3 rein.-con. bridges, rein.-con. paving, shoulder grading, 706 ft. Route R-729, Sect. 5, Glenolden Boro, Delaware Co.; 2 rein-con. bridges, I-beam bridge, bituminous on crushed aggregate surfacing, etc. 3,000 ft. Routes R-20039, R-25001, Conneaut and Beaver Twps., Crawford and Erie Counties; I-beam bridge, bituminous on native stone or crushed aggregate surfacing, etc. 1,949 ft. Route R-20016, R-20012, Greenwood and Vernon Twps., Crawford Co.; 2 bridges, bituminous on native stone or crushed aggregate surfacing 1,441 ft., Route R-08101, Sect. 1, Warren Twp. and Little Meadows Boro, Bradford and Susquehanna Counties; 2 bridges, grading, drainage, bituminous on native stone or crushed aggregate surfacing 925 ft. Route R-08048, Sect. 2, R-08058, Sect. 1, Columbia and South Creek Twps., Bradford Co.; I-beam bridge, bituminous on native stone, crushed aggregate surfacing, incl.-approach flare, 1,650 ft. Route-380, Sect. 2, King Twp., Bedford Co.; I-beam bridge, bituminous on native stone or crushed aggregate surfacing, 960 ft. Route R-356, Sect. 9, Napier Twp., Bedford Co.

Bids Asked January 10

Louisiana—State Hy. Comn., Baton Rouge, F. W. Raggio, chn., six 45 ft. I-beam span bridge, Bayou Macon Bridge, 0.051 mi. hy. Route C-1562, Project 1359, East Carroll and West Carroll Parishes.

Bids Asked January 17

Calif., San Jose—C. H. Purcell, engr. State Hy. Dpt., P. Wks. Bldg., Sacramento, underpass under tracks of Southern Pacific R.R., Polhemus St.

CONTRACTS AWARDED

Alabama—State Hy. Dpt., Montgomery, rein.-con. bridge, Marion Co., to W. L. Cobb Constr. Co., Decatur, Ga. **$35,019*****steel, concrete bridges Lee and Russell Counties, to Vandigriff Constr. Co., Bell Bldg., Montgomery. **$44,568*****steel, concrete bridge, Montgomery Co., to Phillips Constr. Co., Birmingham. **$17,354.** Grand total $96,941. Bids 12/5. CD 11/29.

★**Calif., Los Angeles**—Aliso St. Viaduct, 2,100 ft. long, over Los Angeles River and railroad tracks on each side of river, **WPA.** Over **$2,000,000.** L. Aldrich, engr.

Delaware — U. S. Eng., 900 Custom House, Phila., Pa., removing bridge piers, counterweights, fenders of St. Georges Highway bridge, to McLean Contg. Co., 1301 Fidelity Bldg., Baltimore, Md. **$92,500.** Bids 11/21. CD 11/8—ENR 11/16.

D. C., Wash.—Dist. Comrs. District Bldg. Massachusetts Ave. bridge at Rock Creek and Potomac Parkway, to Potts & Callahan Contg. Co., Inc., 1st Natl. Bank Bldg., Baltimore, Md. **$478,487.** Bids 12/15, awarded 12/20. CD 11/24—ENR 11/30.

North Carolina—State Hy. & P. Wks. Comn., Raleigh, bridge over Tuckaseigee River, Project 9531, Jackson Co., to L. Riddle & Co., Asheville, **$41,277.** Bids 12/7, awarded 12/19. CD 11/28—ENR 11/30.

O., Youngstown—Marshall St. subway under B. & O. R. R. to Herbuck & Augenbaugh, 550 Barwell St., Akron. **$81,599.** Est. $100,000. Bids 10/30. CD 10/23.

Pennsylvania—State Hy. Dpt., I. L. Hughes, secy., North Office Bldg., Harrisburg, I-beam bridge, rein.-con. paving, etc., Route R-153, Sect. 6, Allentown, Lehigh Co., to C. Riebe,

Bridges, etc. (Continued)

Lansford. **$42,171.** Est. over $25,000. Bids 11/17, awarded 12/18. CD 11/6—ENR 11/9.

STREETS AND ROADS

BIDS ASKED

Bids Asked January 5

Pennsylvania—State Hy. Dpt., I. L. Hughes, secy., North Office Bldg., Harrisburg, bituminous on concrete, paving 7,766 ft. Route R-542, Sect. 2, Trainer Boro, Chester, Delaware Co.; rein.-con. paving 10,267 ft. hy., rein.-con. approach to Clarks Ferry Bridge, Routes R-195, Sect. 1, R-195, Spur, R-275, Sect. 1, Reed and Watt Twps., Dauphin and Perry Counties; rein.-con. paving, bituminous on native stone or crushed aggregate surfacing, etc. 9,408 ft. Route R-890, Sect. 4, North Middleton and South Middleton Twps., Cumberland Co.; rein-con., bituminous on new and existing base course surfacing, etc. 11,632 ft. Route R-69, Sect. R-2, Freeport Boro, South Buffalo Twp., Armstrong Co.

Bids Asked January 10

California—C. H. Purcell, engr. State Hy. Dpt., P. Wks. Bldg., Sacramento, grading, plant mix on crusher run surfacing 5.6 mi. Monterey Co.

Louisiana—State Hy. Comn., F. W. Raggio, chn., Baton Rouge, concrete paving 3.503 mi. Logansport-Longstreet Hy., Route 38, Project 2506-B, De Soto Parish; grading, drainage structures 0.942 mi. Route 25, approaches to Tangipahoa River Bridge, Amite, State Project 6209, Tangipahoa Parish.

Bids Asked January 11

†**District of Columbia**—Public Roads Administration, Winder Bldg., Wash., D. C., grading, paving, incidental structures 0.552 mi., Project 6A8, National Capital Parks; adv. ENR 12/28.

Bids Asked

Mississippi—State Hy. Comn., Jackson, withdrew bids to have been opened 11/28, imprv. 1.075 mi. Warren Co. Will readvertise. CD 11/15.

LOW BIDDERS

★**N. Y., Long Island City**—President Queens Boro, Queens Subway Bldg., 21-10 49 Ave., Dec. 20, constructing footings, sewer drainage in midtown hy., from Petracca & Banko, 69-19 Queens Blvd., Winfield, $880,514***paving Cooper Ave., etc., from Highway Imprvt. & Repair Co., 125 Barclay St., New York, $11,556***32 Ave., from W. P. McDonald Constr. Co., 133-03 34 Ave., Flushing, $40,492. CD 12/12—ENR 12/14.

★**Pennsylvania** — Pennsylvania Turnpike Comn., J. D. Faller, secy.-treas., 11 N. 4 St., Harrisburg, Dec. 22, placing approx. 190,000 sq. yd. rein.-con. pavement, etc., Sects. 3P2 and 4P2, Hempfield and Mt. Pleasant Twps., Westmoreland Co., from A. Eidenmiller, Greensburg, $615,043. CD 12/12—ENR 12/14.

CONTRACTS AWARDED

Alabama—State Hy. Dpt., Montgomery, surface treating 0.589 mi. Randolph Co., to Phillips Constr. Co., Birmingham, **$17,076**; steel, concrete bridge on same road, to Vandigriff Constr. Co., Bell Bldg., Montgomery, **$19,578.** Bids 12/5. CD 11/29.

D. C., Wash.—Dist. Comrs., District Bldg., repaving 2,000 cu. yd. cement roadway, 20,000 sq. yd. cement concrete sidewalks, to E. B. Donaldson & Bro., 12 and Brentwood Rd. N.E. **$82,656.** Bids 12/11, awarded 12/15. CD 11/30.

D. C., Wash.—Dist. Comrs., District Bldg., repairing asphalt pavement, concrete base certain streets, to McGuire & Rolfe, Inc., 1401 First St. S.E., Wash. **$196,554. PWA.** Bids 12/12, awarded 12/15. CD 11/30—ENR 12/7.

Florida—State Rd. Dpt., Jacksonville, clearing, grubbing, grading 23 mi. State Rd. 50 from Oldstown to Demory Hill, **WPA. $244,685.**

Fla., Panama City—Road construction, **WPA. $34,750.**

Illinois—State Dpt. P. Wks. & Bldgs., Div. Hys., Centennial Bldg., Springfield, imprv. 4.03 mi. McLean Co., to McCarthy Imprvt. Co., 601 Kahl Bldg., Davenport, Ia. **$176,750.** Bids 11/10, awarded 12/16. CD 11/6.

Illinois—State Dpt. P. Wks. & Bldgs., Div. Hys., Centennial Bldg., Springfield, imprv. 2.53 mi. Edwards Co. to Feigel Constr. Corp., 1513 S. Kentucky Ave., Evansville, Ind. **$40,380;** 4.74 mi. Clinton Co., to Hoeffken Bros., 222 W. B St., Belleville, **$168,909.** Bids 12/5, awarded 12/16. CD 11/22—ENR 11/30.

Indiana—State Hy. Comn., T. A. Dicus, chn., Indianapolis, imprv. 5.866 mi. Montgomery Co., to McMahan Constr. Co., Rochester, **$81,373.** Est. $91,362. Bids 11/21, awarded 12/18. CD 11/9—ENR 11/16.

Ind., Anderson—Imprv. streets and alleys, **WPA. $199,000** allot.

Kan., Lawrence—Road imprvs. **WPA. $51,912.**

Mont., Sidney—C. G. Oland, clk., sidewalks and curbs. **WPA. $17,670.**

Nebraska—A. C. Tilley, engr. State Hy. Dpt., Lincoln, to Nicholas Constr. Co., Geneva, concrete slope facing, Havelock Ave., Lincoln, Lancaster Co., **$4,020;** culverts Pawnee City South, Pawnee Co., **$6,128;** concrete slope facing North 48 St. in Lincoln, Lancaster Co., **$5,145*****to Roberts Constr. Co., 710 1st Natl. Bank Bldg., Lincoln, highway lighting Lincoln Emerald Rd., Lancaster Co., **$1,991;** grading, concrete paving culverts, subway electric inst., Kimball-Harrisburg, Kimball Co., **$105,938*****to A. T. Stewart, 901 C St., Lincoln, grading 3 mi. Pawnee City—South, Pawnee Co., **$7,328*****to H. A. Risk Pipe & Constr. Co., Nebraska City, graveling same road, **$3,657*****to Grover Haring, Kearney, bridge, Pawnee Co., **$6,978*****to Liggett & Knapp, Lincoln, guard rail, Pawnee Co., **$572*****to Bushman Constr. Co., 8101 S. 8 St., St. Joseph, Mo., bank protection Red Willow Co., **$10,837*****to H. A. Shaben Electric Co., Lincoln, highway lighting Lancaster Co., **$1,338*****to Platte Valley Constr. Co., Grand Island, culvert, Dundy Co. **$1,450*****to Weidner & King, Fremont, bridges, Burt Co., **$13,828.** Grand total $169,210. Bids 12/15.

New Jersey—E. D. Sterner, comr. Hy. Dpt., Trenton, imprv. 4.483 mi. Gloucester Co., to William Lafferty, E. Collingswood Ave., Oaklyn, **$30,478;** 4.466 mi. Burlington and Mercer Counties, to Robert W. Cleveland & Co., 60 N. Arlington Ave., East Orange, **$49,993.** Bids 11/17, awarded 12/19. CD 10/31—ENR 11/2.

N. J., Atlantic City—Excavating, grading, paving road from Pleasantville Blvd. to Delaney Ave., **WPA $90,845,** G. R. Swinton, 930 Atlantic Ave., WPA and owner's engr.

N. J., Bayonne—Clearing, excavating, grading, various city lots to form playgrounds, **$33,991;** excavating, grading, paving Ave. F from 19 to 21 Sts., Lexington Ave. from 1 to 3 Sts. and 54 St. from Boulevard to Bay. **WPA $56,807.** H. Jaeger, City Hall, city and WPA engr.

N. J., Bayonne—Removing old sidewalk excavating, grading, concrete sidewalks, Aves. C and B and 15 St., **WPA. $36,844.** H. Jaeger, City Hall, Bayonne, city and WPA engr.

N. J., Bridgeton—Grading, concrete sidewalks, various streets, **WPA. $48,202.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Buena Vista—Excavating, grading, gravel surfacing 8th St., Jackson and Cedar Lake Rds., **WPA. $34,060.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Downe Twp.—Excavating, grading, Newport Neck Rd., **WPA. $76,642.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Estell Manor Twp.—State Dpt. Conservation & Development, State House, Trenton, clearing, excavating, grading, graveling 6.3 mi. fire road called Oakville Rd. **WPA. $42,231.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Franklin Twp.—Warren Co., Courthouse, Phillipsburg, excavating, grading, gravel on rock surfacing, headwalls, etc. Millbrook Rd., **WPA. $36,055.** H. W. Vetter, Belvidere, co. and WPA. engr.

N. J., Galloway — Excavating, grading, gravel surfacing, various streets, **WPA. $130,994.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA. and owners engr.

N. J., Jefferson Twp. — Morris Co., Courthouse, Morristown, grading, excavating, gravel surfacing 13,200 ft. Holland Mt. Rd., **WPA. $50,086.** Winfield Hopkins, Courthouse, Morristown, co. and WPA engr.

N. J., Middle Twp.—Middle Twp., Twp. Hall, Goshen, excavating grading, paving various roads, **WPA. $51,186.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Montclair—Excavating, grading, bituminous surfacing, concrete curbing, sidewalks Lloyd Rd., **WPA. $50,717.** J. B. Hayden, Town Hall, town and WPA engr.

N. J., Morristown—Morris Co., Court House, excavating, grading, drainage, gravel surfacing, Weldon Milton Rd., **WPA. $88,329.** W. Hopkins, Court House, co. and WPA engr.

N. J., Mullica Twp.—Clearing, grading, excavating, ditches, gravel surfacing 5 Ave., Nell, Cotton and Westcoat Rds., **$28,241;** excavating, grading, gravel surfacing 21,340 ft. Reading Rd., **$62,407. WPA.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Mullica Twp. and Hammonton—State, Dpt. Conservation & Development, State House, Trenton, clearing, excavating, ditches, log culverts, gravel surfacing 4.7 mi. Atsion-Batsto Rd. **WPA. $41,238.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Trenton—State Dpt. Conservation & Development, State House, excavating, clearing, grading, ditches, graveling 4 mi. Cedar Swamp Creek and Hunter Mill Rds. **WPA. $34,557.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Trenton—Dpt. Conservation and Development, State House, grading, clearing, excavating, ditches and gravel surfacing 4 mi. Old Fishing Creek Rd. **WPA. $32,861.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA. and owner's engr.

N. J., Ventnor—Excavating, grading, paving, concrete sidewalks, curbing, guttering, various streets, **WPA. $70,886.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. Y., Binghamton—Broome Co., Court House, paving, maintenance county hys. own forces. **$103,500.**

N. Y., New York — President Manhattan Boro, Municipal Bldg., imprv. 6 Ave. from W. 14 to W. 28 Sts., to Highway Impvt. & Repair Co., 125 Barclay St. **$129,768.** Bids 11/29. CD 11/20—ENR 11/23.

N. Y., Owego—Bd. Supervs. Tioga Co., paving, maintenance, county hys., own forces **$40,000** plus. W. Leahy, county hy. comr.

North Carolina — State Hy. & P. Wks. Comn., Raleigh, imprv. 3.28 mi. Burke Co., to Asheville Constr. Co., Asheville. **$63,821.** Est. $50,000-$75,000. Bids 12/7, awarded 12/15. CD 11/28—ENR 11/30.

North Carolina—State Hy. & P. Wks. Comn., Raleigh, imprv. 11.34 mi. Wake Co., to Nello L. Teer, Durham, **$96,125,** est. $100,000-$125,000 ***structures on same road, to John H. Brinkley, Thomasville, **$15,534,** est. $15,000-$15,000 ***0.37 mi. approaches to bridge over Tuckaseigee River near Dillsboro, Jackson Co., to Suber & Co., Inc., Whitmire, S. C., **$20,136,** est. $25,000-$50,000. Grand total $131,815. Bids 12/7, awarded 12/18 and 12/19 respectively. CD 11/28—ENR 11/30.

N. C., Franklin—J. F. Ray, mayor, imprv. streets, **WPA. $71,188.**

★**Ohio**—State Hy. Dpt., Columbus, grading, drainage structures, rein.-con. paving, continuous steel beam bridge with concrete deck on stone faced concrete substructure over Chagrin River, Cuyahoga and Geauga Counties, to Holmes Constr. Co., Palmer St., Wooster, **$804,658.** Est. $819,602. Bids 12/16. CD 12/12—ENR 12/14.

O., Cincinnati—Widening, sheet asphalt and concrete, repaving Reading Rd., to Foley Constr. Co., Boudinot & C.&O.R.R. **$96,827.** Bids 12/5, CE 11/24—ENR 11/3.

O., Youngstown—Widening, repaving Market St., to Kelley & Meyer Co., 1509 Market St. **$91,105.** Est. $100,000. Bids 11/8. CD 11/1.

Okla., Anadarko—Caddo Co., grading, draining, oil material surfacing State Hy. 54 near Hydro, **WPA, $53,251.** W. H. Sindt, Old Court House, Oklahoma City, engr.

Pennsylvania—State Hy. Dpt., I. L. Hughes, secy., North Office Bldg., Harrisburg, imprvg. 24,000 ft. Route 219 Sect. 6, Howard Boro. and Howard Twp., Centre Co., to W. N. Quigley, Mifflin, **$253,695.** Bids 11/3, awarded 12/20. CD 10/24—ENR 10/28.

★**Pennsylvania** — Pennsylvania Turnpike Comn., J. D. Faller, secy.-treas., 11 N. 4 St., Harrisburg, paving approx. 130,000 sq. yd. Sect. "P," turnpike, Westmoreland Co., to Baldwin Bros. Paving Co., Union Trust Bldg., Cleveland, O., **$442,644*****78,000 sq. yd. Sects. 12P2 and 13P1, Bedford Co., to W. L. Johnson Constr. Co., Hicksville, O., **$287,414** ***83,000 sq. yd. Sect. 8P2, Somerset Co., to Union Paving Co., 1227 N. Broad St., Phila., **$307,600*****approx. 290,000 sq. yd. Sect. 18P2, Franklin Co., to Union Constr. Co., 1110 Locust St., Des Moines, Ia., **$978,299.** Grand total $2,016,957. Bids Dec. 13, awarded Dec. 18. CD 12/13—ENR 12/21.

South Dakota — State Hy. Comn., Pierre, imprv. 8.472 mi. Sanborn Co., to William Collins & Son, Fargo, N. D., **$42,249*****13.062 mi. Gregory Co., to D. Gustafson, Sioux Falls, **$76,571*****3.71 mi. Mellette Co., to Jarvis Constr. Co., Sioux Falls, **$11,835*****8.428 mi. Todd and Bennett Counties, also 7.36 mi. Todd Co., to Summit Constr. Co., Rapid City, **$54,280** and **$49,766** respectively*****12.023 mi. McCook Co., also guardrail Perkins and Corson Counties, to Lindekugel & Kolberg, Spencer, **$34,833** and **$4,193** respectively*****977 ft. bridge Pennington Co., to A. A. Prendergast & Assoc., Minneapolis, Minn., and Industrial Contg. Co., 3050 4 Ave., Minneapolis, Minn., **$119,922*****27 and 87 ft. timber bridges Mellette Co., to W. H. Pringle, 102 S. Jefferson St., Pierre, **$7,803.** Grand total $411,453. Bids 12/12. CD 11/29.

Tex., Galveston—B. Harris, mayor, grading, shelling, oiling, paving, street repairs, etc. **WPA. $218,861.**

Tex., Higgins — Lipscomb Co., grading, graveling, drainage roads. **WPA. $40,074.**

Tex., New Braunfels—Comal Co. co judge, graveling, grading, drainage work, **WPA $49,179.**

Tex., Kingsville—Graveling, hard paving, curbing, guttering, ditching, **WPA $26,647.**

Tex., Victoria — City-wide imprvs. and extens. to streets and storm sewers. **WPA. $60,983.**

Virginia—State Dpt. Hys., Richmond, imprv. 6 mi. Prince Edward Co., to S. E. Finley, Box 2389, Roanoke, **$106,787;** 1.4 mi. and 2 bridges Bedford Co., to John A. Archer & Son, and Alley Constr. Co., Wytheville, **$52,211.** Bids 12/19, awarded 12/20. CD 12/7—ENR 12/14.

Virginia—State Dpt. Hys., Richmond, constructing and imprv. state owned highways and bridges, Lee Co. **WPA. $145,471.** B. D. Fleenor, Jonesville, co. engr.

Wis., Milwaukee—Paving alley N. 41 and 42 Sts., to Gumz & Switalski, 2065 S. 18

Streets and Roads (Continued)

St., **$4,289*****alley between N. Holton and N. Booth Sts., also S. 80 St. to J. C. Bluhm & Son, 3256 N. 3 St., **$2,238** and **$23,555** respectively***alley between N. 73 St. and N. Lefeber Ave., also N. 42 St. to Bodemann Constr. Co., 2803 N. 55 St., **$1,210** and **$2,509**, respectively***W. Seeboth St., to N. Harris, 426 N. Cass St., **$1,949*****W. Capitol Dr., to F. M. Gagliano, 1513 N. Jackson St., **$11,057.** Grand total $46,807. Bids 12/8. CD 12/6.

EARTHWORK, WATERWAYS

PROPOSED WORK

★**†Minn., Minneapolis**—U. S. Eng., 615 Commerce Bldg., St. Paul, bids in spring, constructing upper harbor in Mississippi River above St. Anthony Falls, dredging channel, 2 single lift lock and altering existing bridges and other structures, $9,500,000. CD 3/17/38—ENR 3/24/38.

★**†Mont., Fort Peck**—U. S. Eng., 1212 Davidson Bldg., Kansas City, Mo., and Fort Peck, Mont., completing main dam structure for Fort Peck Project, moving over 1,000,000 yd. shell material and placing in dam. About $600,000.

BIDS ASKED

Bids Asked December 28

New Jersey—State Bd. Commerce & Navigation, State House, Trenton, dredging West Creek, Eagles Wood Twp. $15,200; dredging Nacote Creek, Port Republic, Oyster Creek in Leeds Point, and Grassy Bay Black Point, Galloway Twp. $22,250; Beach thorofare and Crook Horn Thorofare, Ocean City and Sunset Lake in Wildwood $17,350; Port Newark, city of Newark, Essex Co. and Broad Thorofare, Longport, Atlantic Co. $12,500.

Bids Asked January 2

Md., Chesapeake Beach—State Roads Comn., Federal Reserve Bank Bldg., Baltimore, L. H. Steuart, secy., placing hydraulic fill and repairing bulkhead, etc., along Chesapeake Bay. PWA. $15,000; adv. ENR 12/28.

Bids Asked January 10

†Mo., Lupus—U. S. Eng., 601 Davidson Bldg., Kansas City, 5,500 ft. dikes and 7,300 ft. revetment in Missouri River between Saline City Bend and Rising Creek Bend, $270,000.

Bids Asked January 15

†Calif., Concord—Bureau Reclamation, Old Post Office Bldg., Sacramento, earthwork, canal lining, structures, Contra Costa Canal, Delta Div. Central Valley Project, Spec. 890; adv. ENR 12/28.

Bids Asked January 18

†Arkansas—U. S. Eng., P. O. Box 60, Vicksburg, Miss., 596,000 cu. yd. levee work and drainage structures, east bank of Red River.

†Louisiana—U. S. Eng., P. O. Box 60, Vicksburg, Miss., 350,000 cu. yd earthwork on east bank of Ouachita River, Caldwell Parish.

Bids Asked January 19

†Florida—U. S. Eng., Jacksonville, dredging 203,300 cu. yd. material, place measurement from channel and turning basin in Indian River at Courtenay; adv. ENR 12/28.

LOW BIDDERS

★**†Calif., Los Angeles**—U. S. Eng., 751 S. Figueroa St., Dec. 21, Sepulveda Dam, from Jahn-Bressi-Bevanda & Gordon, 208 W. 8 St., Los Angeles, $3,121,268. CD 12/12—ENR 12/14.

★**†Pa., York**—U. S. Eng., 332 Post Office Bldg., Baltimore, Md., Dec. 22, Indian Rock Dam, York Co., on main branch of Codorous Creek, from Benjamin Foster Co., 20 St. and Erie Ave., Phila., $1,206,104. CD 11/24—ENR 11/30.

CONTRACTS AWARDED

Calif., Long Beach—Port Manager, constructing one 8 in., three 10 in. and two 14 in. submarine pipe lines, across entrance channel to Long Beach Inner Harbor, to Bennett & Taylor, 598 San Fernando Rd., Los Angeles, **$36,116.** Bids 12/18. CD 12/6.

Calif., Santa Ana—Supervs. Orange Co., Flood Control Dist., Court House Annex, excavating approx. 4.7 mi. earthen channel, Coyote Creek, to Spicer & Thompson, 704 S. Spring St., Los Angeles, **$28,830.** Bids 12/9, awarded 12/19. CD 12/13—ENR 12/14.

†Del., Delaware City—U. S. Eng., Custom House, Phila., Pa., dredging 56,000 cu. yd. place measurement from Branch Channel Chesapeake and Delaware Canal, to Trimount Dredging Co., 10 State St., Boston, Mass. **$21,112.** Bids 11/14, awarded 12/15. CD 10/31—ENR 11/2.

†Neb., Fort Calhoun—U. S. Eng., 1709 Jackson St., Omaha, dikes at Bertrand-Calhoun Bends, to Woods Bros. Constr. Co., 132 S. 13 St., Lincoln. **$19,650.** Bids 12/8. CD 11/14—ENR 11/16.

N. J., Cape May—Jetties, Atlantic Ocean from Ocean St. to Wilmington Ave. **WPA. $126,301.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Egg Harbor—Egg Harbor Twp., Twp. Hall, clearing, excavating various streams, **WPA, $26,561.** G. R. Swinton, 930 Atlantic Ave., Atlantic City. WPA and owner's engr.

N. J., Pleasantville—Bulkhead, parking area adjacent to boat harbor along Lakes bay between Oakland Ave. and Bayview Ave., **WPA, $49,268.** G. R. Swinton, 930 Atlantic Ave., Atlantic City. WPA and owner's engr.

N. J., Secaucus — Hudson Co. Mosquito Comn., 35 Oxford Ave., Jersey City, 11,520 ft. drainage ditches, dikes, tide gates, corrugated pipe in Secaucus Meadows. **WPA. $39,564.** CD 10/13—ENR 10/19.

★**†N. Y., Great Kills (Sta. Staten Island)**—U. S. Eng., 29 Whitehall St., New York, excavating 52,600 cu. yd. material, Great Kills Harbor, to Arundel Corp., Pier 2, Pratt St., Baltimore, Md. **$10,252.** Bids 11/28, awarded 12/11. CD 10/31—ENR 11/2.

★**†R. I., Providence**—U. S. Eng., Industrial Trust Bldg., Providence, dredging 4,180,000 cu. yd. Providence River and Harbor, to Arundel Corp., Pier 2, Pratt St., Baltimore, Md. **$774,410.** Bids 12/1, awarded 12/18. CD 12/5—ENR 12/7.

Tex., Raymondville — Willacy Co. Water Control & Imprv. Dist., I. R. Rickard, pres., Sched. 12 D addn and betterments at administration building and main relief pump. plant, to J. C. Truehart, Smith Young Tower, San Antonio, **$11,900**; Sched. 12 E, various units of work covering whole project, to E. B. Coombs, Edinburg. $14,206. Bids 12/2. CD 11/21—ENR 11/30.

UNCLASSIFIED

Calif., Newport Beach—PIER—Voted $130,000 bonds for Newport pier, $64,200, and Balboa pier, $64,700. R. L. Patterson, City Hall, engr. CD 10/30—ENR 11/9.

Conn., Hartford—PARK IMPROVEMENTS—Bd. Contr. & Supply, 550 Main St., developing Poper Park, service lines, grading, drainage, etc. $60,000. R. J. Ross, city engr.

Fla., Miami Beach—LANDSCAPING—Virginia Key Co., Virginia Key, Miami Beach, extensive grading, planting, roads, sidewalks, etc. at site of proposed $3,000,000 subdivision at Virginia Key. Over $100,000. Graydon Thomas, in charge. **Maturity near future.**

Kentucky—RURAL POWER LINES—Fleming-Mason Rural Electrification Corp., J. K. Smith, project supt., Flemingsburg, preliminary surveys rural power lines in Fleming, Nicholas, Mason, Carter and Greenup Counties, Project D. R. W. Chanaberry, Inc., 1001-4 Realty Bldg., Louisville, engrs.

N. Y., Albany—CONVENTION HALL, etc.—Albany Coliseum, Inc., c/o B. Schade, 157 Ontario St., convention hall and recreation building. $200,000. Architect c/o owner.

★**Pa., Mt. Carmel**—DRAINAGE TUNNEL—State, Harrisburg, and Federal Govt., Wash., D. C., plan 36 mi. drainage tunnel to reduce and eliminate pumping costs in mid-western anthracite coal fields, near here. $7,000,000. J. M. Quigley, c/o State, Harrisburg, state mine engr.

★**Canada**—AIR FIELDS, etc.—Dominion Government, Ottawa, Ont., 60 new air fields $9,000,000, enlarging 20 air fields $2,000,000, about 300 hangars, $30,000,000, huts-ments, etc. $1,000,000 or more, about 67 schools, comprising 3 ground schools, elementary schools of unstated numbers, 16 service flying schools, 10 air observer schools, 10 bombing and gunnery schools, 2 air navigation schools, 4 wireless training schools, for Royal Air Force, $7,500,000.

Que., Verdun—SWIMMING POOL—H. Hadley, engr., City Hall, new swimming pool, Lasale Blvd. $72,500.

BIDS ASKED

Bids Asked January 2

N. Y., New York—CHAIN LINK FENCES—President Manhattan Boro, Municipal Bldg., Contr. 2, constructing chain link fences, complete in front of vacant property, various locations.

†R. I., Quonset Point—HANGAR FOUNDATIONS—Yards & Docks, Navy Dpt., Wash., D. C., fdns. for new steel hangars, at Naval Air Station. Over $25,000.

Bids Asked January 5

N. Y., Brooklyn — BOARDWALK, etc. — Comr. Parks, at office Dpt. Parks, Arsenal Bldg., Central Park, 64 St. and 5 Ave., New York, reconstructing boardwalk, demolition existing structures, hydraulic fill, general construction comfort stations, Coney Island, between Ocean Parkway and W. 15 St., Contr. B-169-140; electrical work for boardwalk, Surf Ave., Seaside Park and comfort stations, Coney Island Ave., between Ocean Parkway and W. 15 St., Contr. B-169-240; plumbing work for comfort stations, Contr. B-169-340; heating and ventilating work Contr. B-169-440.

Bids Asked January 10

†Fla., Jacksonville—RAILROAD TRACKS, etc.—P. Wks. Officer, Naval Air Station, Barnett Bank Bldg., railroad tracks, culverts, etc.

Bids Asked January 23

†Tex., Dallas—AIR CONDITIONING SYSTEM—Pub. Bldgs. Administration, Wash., D. C., air conditioning sys. post office and courthouse.

Bids Asked

N. Y., Syracuse—RADIO TRANSMITTER PLANT—Civic Broadcasting Corp. c/o T. Marshall, 121 Wendell Terrace, radio transmitter plant. Over $25,000 with equip. Will purchase site. CD 10/9—ENR 10/12.

CONTRACTS AWARDED

Ariz., Kingman—RAILROAD RELOCATION—Atchison, Topeka Santa Fe Ry., M. C. Blanchard, ch. engr. (coast lines), Los Angeles, Calif., grading, concrete work for 4 mi. line change near here, to Morrison Knudsen Co., 411 W. 5 St., Los Angeles, about **$375,000.**

†Colorado—TRANSMISSION LINE—Bureau Reclamation, Custom House, Denver, transmission line from Greeley to Fort Morgan, with extens. to Wiggins and Brush, Spec. 1292-D, to Larson Constr. Co., 1902 Blake Ave., Denver. **$33,365.** Bids 10/12. CD 9/26—ENR 9/28.

★**†D. C., Wash** — STEEL WORK for HANGARS — Yards & Docks, Navy Dpt., structural steel work for 2 double hangars at Jacksonville, Fla., single hangar at Jacksonville (Banana River) Fla., and double hangar at Key West, Fla., to Steel Constr. Co., 720 4 Ave. S., Birmingham, Ala. **$329,300*****3 double hangars, 1 ea. at Quonset, R. I., Naval Reserve Air Base, Squantum, Mass., and Floyd Bennet Field, N. Y., to Bethlehem Steel Co., Bethlehem, Pa. **$304,700*****2 double hangars at San Juan, P. R., to Robert R. Prann, P.O. Box 144, San Juan, P. R. **$232,300*****1 single hangar at Guantanamo, Cuba, to Midland Structural Steel Co., 1300 S. 54 Ave., Cicero, Ill. **$61,052.** Grand total $927,352. Bids 12/13. **(Correction**—Contractors and contract figures.) CD 12/19—ENR 12/21, under CA.

Fla., Miami—AIRPORT IMPROVEMENTS—Dade Co., County Bldg., imprv. Morrison Airport, exten. runways, grading, sodding, paving roads, near here. **WPA. $89,844.** J. M. Boyd, co. engr.

†Fla., Pensacola—HANGAR—P. Wks. Officer, Naval Air Station, Pensacola, seaplane hangar, Spec. 9210, to Standard Constr. Co., Inc., Columbus, Ga. **$383,000.** Bids 12/13, awarded 12/18. CD 11/20—ENR 11/23.

†Fla., Tampa—AIRPORT DEVELOPMENT—U. S. Eng., Tampa, theatre, hospital, chapel and facilities for recreation and feeding airport staff, over **$150,000;** residential construction for officers at Mac Dill field airport, over **$150,000. WPA.**

★**†Fla., Tampa**—HANGARS, etc.—U. S. Eng., Tampa, two 250x300 ft. hangars and shop building adjoining same, **$1,200,000;** hospital, warehouses, photographic laboratory and communications building, **$300,000;** streets and runways, **$250,000,** all at McDill field. **WPA.** Grand total $1,750,000.

Ind., Gary—PARKS—Imprv. all city parks, **WPA. $356,000** allot.

Kan., Fort Dodge — GROUND IMPROVEMENTS—Kansas State Soldiers Home, ground imprvs., walks, drive, shrubbery, landscaping, at state home. **WPA. $15,155.**

Ky., Louisville—BOWLING ALLEY—Broadbrook Recreation Alleys, c/o R. J. Burke, 204 E. Jacob St., 1 story, 120x150 ft., brick, stone bowling alley, to Dahlem Constr. Co., 1249 S. Shelby St. Est. **$100,000.** Private plans.

Mass., Cambridge—RECREATION BUILDING, etc.—City, WPA Agent, 75 Charles St., brick recreation building, field house at Fresh Pond Golf Links. **WPA. $104,500.** Est. $100,000. Maginnis & Walsh, Statler Bldg., Boston, archts.

†Neb., Fort Robinson—LANDSCAPING—Con. Q. M. Omaha, drives, landscaping, general imprvs., **WPA. $171,000.**

N. J., Absecon—PARK, etc.—Park and bathing beach on Absecon Blvd., south of Shore Rd., **WPA. $72,520.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Atlantic City—BOARDWALK—Boardwalk substructure, excavating, concrete piers from Jackson Ave. to Inlet, **WPA. $240,372.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Egg Harbor—PLAYGROUND IMPROVEMENT—Excavating, grading, landscaping for playground at Baltimore, Bremen, and Atlantic Aves., White Horse Pike, **WPA. $35,475.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Palisade Park—PARK IMPROVEMENT—Palisade Interstate Park Comn., 50 Center St., New York, N. Y., imprv. Palisade Park, forestry, landscaping, grading, imprv. recreational areas, **WPA. $39,723.** E. A. Devlin, foot of 5 Ave., Paterson, WPA and owner's engr.

N. J., Paterson and **W. Paterson**—RESERVATION IMPROVEMENT—Passaic Co. Park Comn., Courthouse, Paterson, imprv. Garret Mt. Reservation, 2 lookout shelters picnic area, etc., **WPA. $95,448.** CD 12/13—ENR 12/21.

N. J., Port Republic—PARK IMPROVEMENTS—Imprv. Blackman Memorial Park and boating facilities, **WPA. $49,964.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Vineland—HOSPITAL GROUND IMPROVEMENTS—State, Dpt. Institutions & Agencies, State House, Trenton, ground imprvs. of state hospital, storm drains, playground imprvs., concrete curbs, gutters, **WPA.**

Unclassified (Continued)

$32,499. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. Y., Evans—PARK IMPROVEMENTS—Additional imprvs. town park, pedestrian subway, fireplaces, benches, etc., **WPA. $25,000.**

N. Y., Troy—RADIO TRANSMITTER STATION—Troy Broadcasting Co., Proctor Bldg., radio transmitter station, to C. T. Blanchard, 2 Lewis St. Est. over **$25,000** with equip. F. R. Ripley, genl. mgr. CD 10/3/38.

North Carolina—RURAL ELECTRIC LINES—Jones Onslow Electric Membership Corp., Richlands, 293 mi rural electric lines, Jones, Onslow, and Duplin Counties, to Miller-Baxter Co., 445 N. Penn. St. No 301, Indianapolis, Ind. **$179,592.** Bids 12/7, awarded 12/13. CD 11/29.

N. C., Greensboro—STREET LIGHTING, etc—University of North Carolina, Chapel Hill, street lighting and wiring sys for campus at Womans College, to M. B. Haynes, 76 Woodfin St., Asheville. **$8,300.** Est. $10,000. Bids 11/28. CD 11/21

N. C., Raleigh—ATHLETIC FIELD and STADIUM—G Andrews, mayor, developing athletic field and stadium at Devereux Meadow, **WPA. $11,747** additional allot. ($100,000 previously allotted project.) C. L. Barnhart, city engr.

Ohio—RURAL LINES—Licking Rural Electric Cooperative, C. D. Dunlap, supt., Utica, 273 mi. rural electric lines Richland, Ashland, Knox, Licking and Franklin Counties, to Davis-Hydaker Co., Spencerville, **$88,657.** Est. $259,000. CD 11/3—ENR 11/9.

Ohio—RURAL LINES—South Central Rural Electric Cooperative, Inc., Lancaster 95 mi rural electric lines, Fairfield, Hocking, Muskingum, Licking, Franklin, Ross and Madison Counties, to Paul L. Gilmore, 395 E. Broad St., Columbus **$70,908.** Est. $95,000. Bids 11/15. CD 11/13.

O., Dennison—ATHLETIC FIELD, etc.—Athletic field and stadium, **WPA. $75,000.**

Pennsylvania—VENTILATION BUILDING, etc.—Pennsylvania Turnpike, Comn., through chn., 11 N. 4 St., Harrisburg, J. D. Faller, secy.-treas., ventilation buildings and open cut tunnel section, Contr. 64, Sect. A-4, Somerset Co., to Ritter Bros., 1511 N. Cameron St., Harrisburg, **$158,410*****Sect. T-4, Huntingdon and Franklin Counties, to B. H. Kline, Bloomsburg, **$148,798*****plumbing sys. for 13 tunnel portal ventilation buildings, 1 at Rays Hill tunnel, 2 each at Laurel Hill, Allegheny Mountain, Sideling Hill, Tuscarora Mountain, Kittatinny Mountain and Blue Mountain Tunnel, Sect. 4P, to Pitt Constr. Co., 1215 Washington Blvd., Pittsburgh, **$109,850*****heating sys., mechanical installations, for tunnel portal ventilation buildings, at Laurel Hill, Allegheny Mountain, Rays Hill, Sideling Hill, Tuscarora Mountain, Kittatinny Mountain, Blue Mountain Tunnels, Sect. 4H, (not incl. fans, motors and transmissions for ventilation sys), to J. Hall, Ligonier, **$44,797.** Grand total **$461,856.** Bids 12/15, awarded 12/12. CD 12/5—ENR 12/7.

Pa., Kane—WELL DRILING, etc.—Hiawatha Oil & Gas Co., Benedum-Trees Bldg., Pittsburgh, drilling first 2 wells for natural gas development, 30,000 acres western McKean Co., near here, to F. D. Hill, Kane. Total est. **$100,000** plus. M. Snyder, Hotel Holley, Bradford, engr.

South Carolina — SUBSTATIONS — Finance Bd. Greenwood Co., substations, to R. H. Bouligny, Inc., 433 W. Moreland St., Charlotte, N. C., **$412,000.** Bids 10/10. CD 10/19—ENR 10/26.

Texas—RURAL LINES—Midwest Electric Cooperative, Inc., Rotan, 142 mi rural electric power transmission lines, to J. E. Morgan & Sons, Waco. **$66,496.** Bids 12/5. CD 11/27.

Tex., Beaumont—PARK IMPROVEMENTS—H. A. Coale, mayor, municipal park imprvs., concrete swimming pool, drainage, landscaping, playgrounds, equip., **WPA. $73,520.**

Tex., Burton—ATHLETIC COURTS—Burton Consolidated School Dist., athletic courts, landscaping, grading, drainage, fencing, **WPA. $46,484.**

★**Tex., Corpus Christi**—BAY FRONT IMPROVEMENTS—Corpus Christi Deep Water Port, c/o A. C. McCaughan, city mayor, bay front imprvs., protective rein.-con. sheet steel concrete walls to provide against high waters and tidal waves, laying rock riprap, to Jay DePuy, Milam Bldg., San Antonio, and Corpus Christi. **$1,150,000.**

Tex., Munday — PARK—R. B. Harrell, mayor, developing municipal park, recreational facilities, earthen lake, earth dam, 9 hole golf course, drainage, leveling, athletic diamonds, **WPA. $49,812.** A. B. and H. D. Withers, c/o owner, engrs.

Tex., San Antonio—BOWLING ALLEY—E. H. Brimer, Aztec Bldg., general contract 1 story, 100x145 ft. bowling alley, to Mitchell Constr. Co., Builders Exch. Bldg., **$28,260.** CD 10/20—ENR 11/2.

Tex., Tyler—PARK IMPROVEMENTS—C. G. Fairtrace, mayor, imprv. park and playgrounds, rein.-con. swimming pool., grandstand, etc., **WPA. $132,968.**

Wisconsin—RURAL LINES—Grant Co Electric Cooperative, Lancaster, 64 mi. rural electric transmission lines, Grant Co., to I. & E Constr. Co., 2732 W. 43 St., Minneapolis, Minn. **$13,358.** REA. Bids 12/5 CD 11/26—ENR 11/30.

★**†T. H., Pearl Harbor**—GRAVING DOCKS—yards & docks, Navy Dpt., Wash., D. C., 2 concrete graving docks, spec. 9100, to Hawaiian Dredging Co., Ltd., Honolulu, T. H., and Pacific Bridge Co., 333 Kearny Ave., San Francisco, Calif., **$6,259,268.** Bids 12/20. CD 11/10—ENR 11/16.

MATERIALS, EQUIPMENT

BIDS ASKED

Bids Asked January 2

†ARC WELDING SETS—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., portable arc welding sets, Sched. 195.

†BARGE TRACKS MATERIAL—**Wash., D. C.**—At office General Purchasing Officer, Panama Canal, material for barge tracks (tracks, anchors and accessories), Sched. 3798; nails and brads, Sched. 3809.

†COPPER-NICKEL-ALLOY TUBING, etc.—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., copper-nickel-alloy tubing, Sched. 160; arc welding machines, Sched. 183; trunnion blocks, Sched. 184.

†MOORING BOLLARDS—**Duluth, Minn.**—U. S. Eng., Canal Park, Duluth, 22 c.i. mooring bollards, Keweenaw Waterway-Lily Pond Mooring Pier—Sect. A.

†RECIPROCATING PUMPS—**Kansas City, Mo.**—U. S. Engr., 601 Davidson Bldg., 2 reciprocating pumps, Inv. 461-40-111.

TRUCKS—**Omaha, Neb.**—Trucks.

†SHEET STEEL—**Portsmouth, N. H.**—Bureau Supplies & Accounts, Navy Dpt., Wash., D. C., corrosion resisting sheet steel, Sched. 210.

STREET CASTINGS, etc.—**Cincinnati, O.**—H. F. Wagner, city purch. agt., 162 City Hall, street castings, fencing and parts to Bd. Park Comrs., steel spiral welded bitumastic enamel-line spun pipe and laying c.i. pipe for Dpt. WW., Div. Distribution; steel windows and accessories.

STONE, etc.—**Pennsylvania**—Dpt. Property & Supplies, 419 North Office Bldg., Harrisburg, stone, Juniata Co., Lancaster Co., Inquiry H-245112-768; Snyder Co., Inquiry H-25-0818; stone or slag, Schuylkill Co., Inquiry H-248607; Clarion Co., Inquiry H-283541-42; Montgomery Co., Inquiry H-9874; hydrated lime, f.o.b. East Kittanning, Inquiry H-319892; cinders, Clarion Co., Inquiry H-9872; Fayette Co., Inquiry H-288058; bituminous material, Lancaster Co., Inquiry H-17562; stone or crushed gravel for use in Susquehanna Co., Inquiry H-316168; hydrated lime, 50 lb. paper bags, f.o.b. Lancaster, Inquiry H-175765; round soft steel, various sizes, f.o.b. Clarion, Inquiry H-283517.

Bids Asked January 3

†TUBES—**Brooklyn, N. Y.**—New York Signal Corps, Procurement Dist., 58 St. and 1 Ave., tubes.

†CENTRIFUGAL PUMPS—**Dayton, O.**, Con. Q. M., Wright Field, centrifugal pumps for boiler house.

STATIONARY VISES, ETC.—**Pennsylvania**—Dpt. Property & Supplies, 419 North Office Bldg., Harrisburg, stationary vises, f.o.b. 1 each, Harrisburg, Parsons and Clearfield, Inquiry H-9876; inlet grates, frames, hoods, Lackawanna Co., Inquiry H-243315; structural steel, various sizes, use in Snyder Co., Inquiry H-250814; sand, Snyder Co., Inquiry H-250817; Luzerne and Lackawanna Counties, Inquiry H-240909-243317; c.i. pipe, f.o.b. Allentown, Inquiry H-251664; cinders, Armstrong and Butler Counties, Inquiry H-9871; state tested cement, f.o.b. Selinsgrove, Westmoreland Co., Adams Co., Inquiry H-9875; stone or crushed gravel, Bucks Co., Inquiry H-9873.

STRUCTURAL STEEL—**Dunmore, Pa.**—U. S. Treas. Dpt., State Procurement Office, 500 S. Front St., Harrisburg, structural steel for construction Dunmore High School Stadium (WPA project), f.o.b. Federal Works Agency, Dunmore, Inv. 401-2705.

Bids Asked January 4

†OIL BURNER AND TANK—**Wash., D. C.**—War Corps of Engineers, Beach Erosion Bd., 2100 Virginia Ave., N.W., oil burner and oil storage tanks, Inv. W 788-40-3.

†PIPE FITTINGS, etc.—**Wash., D. C.**—At office General Purchasing Officer, Panama Canal, pipe fittings, pipe straps, cocks, steam hose couplings and hose clamps, Sched. 3797.

†STEEL PIPE—**Vicksburg, Miss.**—U. S. Eng. P. O. Box 60, extra heavy black wrought steel pipe, Inv. 1106-40-138.

†METER—**Brooklyn, N. Y.**—New York Signal Corps, Procurement Dist., 58 St. and 1 Ave., meter, connector, binding post chamber.

CINDERS—**Pennsylvania**—Dpt. Property & Supplies, 184 Capitol Bldg., Harrisburg, 5 carloads of cinders, f.o.b. State Farm Products Show, 11 and Maclay St., Harrisburg, Inquiry H-36149.

DUMP TRUCKS—**Pennsylvania**—Dpt. Property & Supplies, R. Rowland, secy., Capitol Bldg., Harrisburg, 70 dump trucks, 15,000 lb. gross capacity for use of Dpt. Forests & Waters, del. at Harrisburg, Inquiry A-69018 and H-231182.

†OIL PURIFIER — **Odair, Wash.** — Bureau Reclamation, Custom house, Denver, Colo., one oil purifier, one filter-paper drying oven, portable dielectric test set for Grand Coulee power plant, Columbia Basin Project, Spec. 1319 D.

Bids Asked January 5

TRACK SPECIALS, etc. — **San Francisco, Calif.**—T. A. Brooks, city purch. agt., City Hall, manganese track specials for Municipal Railway, Inv. 2318. Over $1,000.

†IRON BUCKETS, etc.—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., iron and steel galvanized buckets, Sched. 178; naval brass, Sched. 206; nickel copper alloy bars and rods, Sched. 208.

†METALS, etc.—**Wash., D. C.**—Treas. Dept. Procurement Div., metals, aluminum, copper, lead, welding rods, steel, pig tin, zinc, terneplate, tinned plate, structural steel, Classes 46, 47, and 48.

†TRUCK—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., truck, Sched. 190.

†ZINC OXIDE, etc.—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., zinc oxide, Sched. 158; electric cable, Sched. 180; motor truck, Sched. 190; chain, Sched. 204.

†STEEL FRAMING—**Leavenworth, Wash.**—Bureau Reclamation, Custom house, Denver, Colo., structural steel framing for cold storage and heating plant at station for migratory fish control, Columbia Basin Project, Spec. 1320 D.

Bids Asked January 8

†PIPE — **Bremerton, Wash.** — Puget Sound Navy Yard, welded or seamless steel pipe, Req. NSA 553.

Bids Asked January 9

†STEEL TAP RIVETS—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., steel tap rivets, Sched. 248.

†TRUCK, etc.—**Wash., D. C.**—Bureau Supplies & Accounts, Navy Dpt., truck, Sched. 217; structural steel, Sched. 228; cast aluminum alloy castings, Sched. 256; corrosion resisting steel, Sched. 232.

Bids Asked January 11

†TRASH RACKS—**Texas**—Bureau Reclamation, Custom House, Denver, Colo., trash racks for outlet works at Marshall Ford Dam, Colorado River Project, Spec. 891; adv. ENR 12/28.

Bids Asked January 15

†CHIPBOARD — **Dover, N. J.** — Picatinny Arsenal, chipboard, Proposal 672-40-917.

Bids Asked January 16

†POWER UNIT — **Brooklyn, N. Y.** — New York Signal Corps, Procurement Dist., Army Base, power unit.

Bids Asked January 18

CARBONIZATION EQUIPMENT, etc.—**Los Angeles, Calif.**—Metropolitan Water Dist., 306 W. 3 St., F. E. Weymouth, engr., carbonization equip., incl. gas or oil fired horizontal water boiler, 2 water cooled flue gas coolers, flue gas, flow meter, combination control equip., gas flow regulating valve, two 5,000 c.f.m. flue gas compressors, for water softening plant, Spec. 318. Over $1,000.

Bids Asked

†CONDUIT — **San Francisco, Calif.** — U. S. Eng., 401 Custom House, San Francisco, multiple duct tile conduit or transite (or equal) electric conduit, Inv. 868-40-172.

ASPHALT, etc.—**San Jose, Calif**—Asphalt, sewer manhole covers and rings, reinforcing steel, traffic lacquer and varnish, gravel and sand, for year 1940. Over $10,000.

FIRE ENGINE—**Dobbs Ferry, N. Y.**—Bd. Trustees, fire engine. Over $1,000. Award to be made in January.

SNOW FENCE—**Jamestown, N. Y.**—L. L. Graham, city engr., 1,200 lin. ft. snow fence, unspecified tonnage galvanized pipe. Over $1,000. CD 12/5—ENR 12/14.

ROAD ROLLER—**South Carolina**—State Hy. Dpt., Columbia, four 5 ton road rollers, del. Columbia.

SNOW PLOW, etc.—**Toronto, Ont.**—York Twp., J. Harrie, clk., 40 Jarvis St., in market snow plow and power grader.

CONTRACTS AWARDED

†CEMENT—**Denison, Tex.**—U. S. Eng., Denison, 280,000 bbl. cement for Denison Dam on Red River to Universal Atlas Cement Co., Waco **$365,568.** Est. $400,000. Bids 12/5. CD 11/14—ENR 11/16.

PUBLIC BUILDINGS

PROPOSED WORK

★**Calif., Los Angeles** — Los Angeles City Housing Auth., W. H. Schuchardt, housing consult., 1031 S. Bway., Los Angeles, plans by Associated Architects, Chamber of Commerce Bldg., San Vicente Village, housing project, 200 family units, 9 acre tract, Sepulveda Blvd., near Sawtelle or W. Los Angeles. $844,900.

Public Buildings (Continued)

★**Calif., Los Angeles** — Housing Auth. of City, 1031 S. Bway., plans by Southeast Housing Project Architects, 607 Architects Bldg., Pueblo Del Rio housing quarters for 400 colored families, 51 St., $1,769,795; plans by Associated Architects, Architects Bldg., Rancho San Pedro housing project for 300 families, 3 St., Santa Cruz, Palos Verdes and Center St., $1,298,500. CD 7/14—ENR 7/27.

★**Mich., Lansing**—Plans by Warren S. Holmes Co., 220 Old Tower Bldg., Lansing, for Western High School. $1,250,000.

★**N. J., Beverly**—Beverly Housing Auth., 14 units, dwellings, 2½ story, brick housing project. $500,000. P. L. Fowler Co., 224 E. Hanover St., Trenton, and LeRoy Riegel, Broad St. Bank, Trenton, archts. J. P. Pette, 131 Jackson St., Trenton, engr. CD 11/3—ENR 11/9.

★**N. J., Burlington** — Burlington Housing Auth., Burlington, 140 units, 2½ story, brick housing project. $500,000. L. S. Kaplan, 33 W. State St., Trenton, archt.

★**Pa., Scranton**—Scranton Housing Auth., c/o J. W. Crolly, Counsel, Lincoln Trust Bldg., H. D. Case, secy., plans by S. H. Von Storch and Coon & Barrett, all Union Bank Bldg., slum clearance and housing project providing facilities for approx. 250 families. $1,225,000. J. Rossa McCormick, 348 N. Sumner Ave., engr. CD 6/29—ENR 7/6.

Wash., Spokane—Spokane Co., Court House, bids shortly after first of year 4 story, 65x160 ft. court house addn. $150,000. Rigg & Van Tyne, Peyton Bldg., archts.

Wis., LaCrosse—LaCrosse Co., highway shop. $40,000. P. A. Hartwig, comr.

★**†Wyo., Fort Warren**—Con. Q.M., extensive barracks imprvs., 20 sets quarters for non-commissioned officers, quarters for commissioned officers, exten. barracks for men, laundry addn., bakery addn., shops, garages, etc. $3,468,000. Seeking appropriation from Congress.

†T. H., Oahu—Yards & Docks, Navy Dpt., Wash., D. C., magazine buildings, railroad tracks, roads and services, Spec. 9397.

BIDS ASKED

Bids Asked January 3

†La., Alexandria—U. S. Property & Disbursing Officer, Headquarters Bldg., Jackson Barracks, New Orleans, 2 kitchens and mess halls at Camp Beauregard.

†O., Dayton—Con. Q. M. Wright Field, substation structure and electric equip. at Wright Field, Extended Date. CD 12/12, ENR 12/14.

Va., St. Petersburg—Virginia State College for Negroes, at office L. H. Foster, treas. (1) brick setting work for 350 hp. water tube boiler (2) boiler plant auxiliaries and piping for above.

Bids Asked January 5

†Tex., Austin—Lower Colorado River Auth., Fritz Engelhard, chn. Bd. Dir., 818 Littlefield Bldg., power plant at Marshall Ford power plant, and appurtenant structures. C. McDonough, Littlefield Bldg., engr. and mgr.

Bids Asked January 8

†Ore., Bar View—Treas. Dpt., Coast Guard, Wash., D. C., steel lookout tower, watch house atop tower, rein.-con. base and building approach walkway at Tillamook Bay Coast Guard Station.

Bids Asked January 10

†Fla., Orlando—Pub. Bldgs. Administration, Wash., D. C., passenger elevator in post office and court house.

Bids Asked January 12

★**Conn., Norwalk**—City, S. Roodner, chn. Norwalk Housing Auth., 74 Washington St., South Norwalk, one hundred 2 story, bsmnt., 30 x 145 ft., brick houses. Day, Ramond, Water and Tolles Sts., $800,000, USHA. Extended date. Frank Harper Bissell, 103 Park Ave., New York, archt. Westcott & Mapes, 139 Orange St., New Haven, engrs. CD 12/12—ENR 12/14.

Mich., Ypsilanti—State Bd. Educ., Lansing, 4 story, 120 x 150 ft., brick, stone dormitory for boys on campus Michigan State Normal College. R. S. Gerganoff, 206 N. Washington St., archt. CD 12/20.

Bids Asked January 15

O., Oxford — C. G. Wahl, dir. P. Wks., State Office Bldg., Columbus, power plant imprvs. at Miami University, new boiler feed and vacuum pumps and piping, radial brick chimney and fdns., smoke breeching and insulation. $30,000. J. P. Schooley, Columbus, state archt. Fosdick & Hilmer, Union Trust Bdgl., Cincinnati, engrs.

Bids Asked about January 15

Ala., Birmingham—Birmingham Housing Auth., c/o J. C. De Holl, executive dir., "Central City Housing Project" Ala. 1-3 and 1-3A, 24 St. and 26 St. Blocks. Miller, Martin & Lewis, Title Bldg., archts. CD 10/17—ENR 10/19.

Bids Asked January 16

†Wash., Vancouver—Pub. Bldgs. Administration, Wash., D. C., post office exten.

Bids Asked January 17

†Colo., Golden—Pub. Bldgs. Administration, Wash., D. C., post office. CD 8/18—ENR 8/31.

†Fla., Tampa—Con. Q.M., Tampa, photographic laboratory building and 3 double noncommissioned officers' quarters at Southeast Air Base; adv. ENR 12/28.

†T. H., Schofield Barracks—Con. Q.M., Hickam Field, T. H., and Fort Mason, Calif., alterations and addns. to nurses' quarters. About $112,000.

Bids Asked January 18

†Mich., Fenton—Pub. Bldgs. Administration, Wash., D. C., post office. CD 8/18—ENR 8/31.

Bids Asked January 19

†Calif., Visalia — Dpt. Agriculture, Farm Security Administration, 95-2nd St., San Francisco, five two story weed frame multifamily type buildings, to house 6 families, for Tulare Unit, Calif., Migratory Labor Camps. CD 12/6—ENR 12/21.

Bids Asked January 23

Calif., Chino—W. K. Daniels, acting state archt., P. Wks. Bldg., Sacramento. Maximum Security Group, comprising 5 buildings, having total combined floor area approx. 90,000 sq. ft., concrete chimney, building 1 and 2 story.

Bids Asked

Mass., Fall River—Dpt. P. Wks., 2 story, brick, steel Junior High School addn. and cafeteria. $150,000 E. M. Corbett, 49 Purchase St., archt. CD 1/5.

LOW BIDDERS

Ala., Anniston—Anniston Housing Auth., R. Hamilton, chn., Dec. 18, fifteen 2 story brick, tile, rein-con. buildings, containing 12 units each, Ala. 4-1, from Algernon Blair, 1st Natl. Bank Bldg., Montgomery, $414,750. CD 11/21—ENR 11/30.

★**Mich., Detroit** — Detroit Housing Comn., 735 Randolph St., Dec. 18, "Parkside" addn. low rental housing project, from O. W. Burke Co., 1010 Fisher Bldg. $767,480. CD 12/12.

★**N. J., Newark**—Newark Housing Auth., G. P. Gillen, chn., City Hall, Dec. 21, Housing Project 21 apartment buildings, 3 story, bsmnt., 650 families, Orange and Nesbitt Sts., from Frank Briscoe Co., Inc., 287 S. 19 St., Newark, $1,748,780***steel, from B. Katchen Iron Wks., 149 Shaw Ave., Irvington, $51,806***plumbing, from Jaehnig & Peoples, 223 13 Ave., Newark, $225,400***heating, from R. G. Maupai, 217 8 St., West New York, $127,127***electrical work, from Paul H. Jaehnig, Inc., 106 Academy St., Newark, $58,931. CD 11/20—ENR 11/23.

★**N. Y., Brooklyn**—Dpt. P. Wks., Municipal Bldg., New York, Dec. 20, General Contract, pavilion for psychiatric patients at Kings County Hospital, from Tobias Heller & Co., 415 Lexington Ave., New York, $929,000***plumbing, from R. W. Baylor, 9 Sommera Lane, Staten Island, $143,211***heating, from Heating Maintenance Corp., 375 Grand Concourse, New York, $99,623***electrical work, from Martin Epstein Co., 955 Lafayette Ave., Brooklyn, $97,610***steel, from Lehigh Structural Steel Co., 17 Battery Pl., New York, $132,970. CD 12/14—ENR 11/16.

★**Pa., McKeesport** — McKeesport Housing Auth., Dec. 22, general contract E. R. Crawford Village housing project, from C. Shutrump, P. O. Box 366, Youngstown, O. $629,600. CD 12/13—ENR 11/30.

★**Pa., Pittsburgh**—Pittsburgh Housing Auth., H. J. Hovde, administrator, 1305 Law & Finance Bldg., Dec. 22, general contract, Terrace Village Unit 2, housing project, from Hunkin Conkey Constr. Co., 1704 E. 12 St., Cleveland, O. Base bid 1, $3,674,000. Base bid 2, $3,897,000. CD 11/21—ENR 11/30.

CONTRACTS AWARDED

Calif., Oakland — Housing Auth., 1924 Bway., general contract 154 dwellings housing project, Campbell Village, Cal. 3-2, to K. E. Parker Co., 135 South Park St., San Francisco, **$378,000***** plumbing and heating, to Kruse Co., 6247 College Ave., **$51,090** and **$3,895** respectively*** electrical work, to Kerr & Clifford, 4010 Foothill Blvd., **$16,700.** Grand total $499,685. Award subject to USHA approval. Bids 12/13. CD 12/15—ENR 12/21.

Calif., Sacramento—1 story, wood frame, machine shop and blacksmith shop addn., 40 x 142 x 20 ft., to H. W. Robertson, 2700 R St. **$17,986,** exclusive of equip. CD 12/11—ENR 12/14.

★**Calif., San Francisco** — San Francisco Housing Auth., Potrero Project low cost housing to Meyer Constr. Co., 735 Portola Dr., **$1,349,890.** USHA. CD 12/1—ENR 12/7.

†Delaware—U. S. Eng., Customhouse, Phila., Pa., bridge control room on Chesapeake and Delaware Canal, Reedy Point, to H. R. Shank, Elkton, Md. **$2,441.** Bids 11/28. CD 11/15—ENR 11/23.

†Fla., Lake Worth—Pub. Bldgs. Administration, Wash., D. C., post office, to Algernon Blair, 1209 1st Natl. Bank Bldg., Montgomery, Ala. **$68,252.** Bids 12/5, awarded 12/15. CD 11/8—ENR 11/16.

†Fla., Pensacola—P. Wks. Officer, Naval Air Station, Pensacola, administration and recreation buildings, Spec. 9329, to V. P. Loftis, 201 Builders Bldg., Charlotte, N. C. **$131,250.** Bids 12/13, awarded 12/19. CD 11/17—ENR 11/23.

†Ill., Mt. Carroll—Pub. Bldgs. Administration, Wash. D. C., post office, to H. D. White & Co., 2202 W. 107 Pl., Chicago. **$51,048.** Bids 11/28, awarded 12/16. CD 10/26—ENR 11/2.

Ill., Salem—O. J. McMackin, mayor, power plant addn. to Fleischer-Seeger Constr. Co., Railway Exch. Bldg., St. Louis, Mo. **$27,265,** Baumes Eng. Co., Railway Exch. Bldg., St. Louis, Mo., engrs.

†Ia., Des Moines—Veterans Administration, Arlington Bldg., Wash., D. C., general contract, wing to veterans hospital, to Kucharo Constr. Co., 404 Hubbell Bldg. **$118,000.** Bids 12/5. CD 11/9—ENR 11/16.

†La., New Orleans—Div. Sales, Purchases & Traffic, Dpt. Agriculture, Wash., D. C., new industrial laboratory unit and solvents storage building, at Southern Regional Laboratory on South side of Robert E. Lee Blvd. between Spanish Fort Blvd. and H. Sts., to A. J. Rife Constr. Co., Box 58, Dallas, Tex. **$318,750.** Bids 11/28, awarded 12/16. CD 11/3—ENR 11/9.

★**Md., Baltimore**—Baltimore Housing Auth., McCawley Bldg., Armistead Gardens low cost housing Project, to John McShain, Inc., 6 W. Madison St., Baltimore, Md., **$1,844,000.** Bids 12/5. CD 12/8—ENR 12/14.

†Md., Chesapeake City—U. S. Eng., Custom House, Phila., Pa., bridge control house, to H. R. Shank, Elkton. **$3,268.** Bids 11/28. CD 11/15—ENR 11/23.

†Mich., Dearborn—Veterans administration Facility, Arlington Bldg., Wash., D. C., addn. to Boilerhouse Bldg. 10, to Drake Avery Co., 147 W. Woodbridge St., Detroit, Mich., **$36,779.** Bids 11/21, awarded 12/16. CD 10/27—ENR 11/2.

Miss., Meridian—Meridian Housing Auth., W. W. George, mgr., 402 Citizens Natl. Bank Bldg., 15 dwelling buildings and one combination dwelling and office building, Miss 4-2, to B. L. Knost, Hattiesburg. **$247,742.** Subject to approval USHA. Bids 12/14, awarded 12/15. CD 11/27—ENR 11/30.

Miss., Pascagoula—Jackson Co., addn. to Jackson Co. woolen mills, near here, to B. L. Knost, Sta. A, Box 101, Hattiesburg. **$72,682.** Bids 12/18, awarded 12/19. CD 11/28—ENR 11/30.

†Mo., Eldon—Pub. Bldgs. Administration, Wash., D. C., post office, to Jos. Schacher Constr. Co., P.O. Box 424, Abilene, Kan. **$44,800.** Bids 12/1, awarded 12/14. CD 11/2—ENR 11/9.

Mo., Koch—Bd. Pub. Serv., City of St. Louis, City Hall, St. Louis, furnishing, installing additional boiler in boiler house at Robert Koch Hospital, to Erie City Iron Wks., 1422 East Ave., Erie, Pa., **$20,466***** stoker, to Laclede Stoker Co., 4438 Hunt Ave., St. Louis, **$17,448***** boiler setting, to J. J. McFadden, 7358 Stanford St., University City, St. Louis, **$4,375***** refrigeration plant, to Sodeman Heat & Power Co., 2306 Delmar Blvd., St. Louis, **$43,286.** Grand total $85,575. Bids 11/28. CD 11/20—ENR 11/23.

†Nev., Boulder City — Bureau Reclamation, Customhouse, Denver, Colo., exhibit building at Boulder Dam, force account. Est. **$50,000.**

★**†Nev., Hawthorne**—Yards & docks, Navy Dpt., Wash., D. C., magazines, roads, services, naval ammunition depot, to W. P. Neil Co., Ltd., 4814 Loma Vista Ave., Los Angeles, Calif., **$1,132,500.** Bids 12/20 awarded 12/21. CD 11/3—ENR 11/9.

N. J., Atlantic City—Municipal poultry market, Magellan, Pennsylvania and Reading Aves., **WPA. $71,480.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

†N. Y., Brockport—Pub. Bldgs. Administration, Wash., D. C., post office, to J. Dall Jr., Inc., 121 E. Seneca St., Ithaca. **$55,100.** Bids 11/17, awarded 12/15. CD 10/19—ENR 10/26.

O., Toledo — Toledo Metropolitan Housing Auth., A. G. Spieker, chn., 392 Nebraska Ave., general construction, plumbing, heating, electrical work and landscaping, Brand Whitlock Homes, to J. H. Berkebile & Son, 998 Whittier St. **$360,000.** USHA. Bids 11/28. CD 11/1—ENR 11/9.

Pa., Phila. — Philadelphia Housing Auth., 21 and Parkway, demolition work for site of housing project, 3rd unit, 5 and Poplar Sts., to C. Heady, 5506 Cedar Ave. **$34,000.** CD 10/25—ENR 10/12.

S. C., Charleston—Charleston Housing Auth., J. E. Smith, chn., 20 Franklin St., general contract, plumbing, heating, etc., "Wraggborough Homes," 128 units, to Artley Co.,

Public Buildings (Continued)

504 Bay St., Savannah, Ga. **$344,000.** Bids 12/11, warded 12/19. CD 11/15—ENR 11/23.

★**Tex., Corpus Christi**—Corpus Christi Housing Auth., F. Vinson, exec. secy., Furman Bldg., housing project, S-1RA, Kinney Pl., white unit, 8-3R, Leathers Center, negro unit, 8-2R, to M. W. Watson, Scarbrough Bldg., Austin, Tex. and Natl. Bank Topeka Bldg., Topeka, Kan. **$821,625.** USHA. Tentative award. Bids 12/12. CD 12/15—ENR 12/21.

Tex., Lindale—Bd. Educ., H. Stringer, fireproof high school unit, **WPA. $153,000.** CD 11/29—ENR 12/7.

†**Tex., San Antonio**—Con. Q.M., Fort Sam Houston, A. C. warehouse and maintenance building, to Hill & Combs, 321 Melrose Pl. **$180,945.** Bids 12/12, awarded 12/16. CD 11/29.

†**Wash., Lynden**—Pub. Bldgs. Administration, Wash., D. C., post office, to W. VanWerven, J. Roosendall, N. Boerhave and C. J. Van Andel, Lynden. **$49,065.** Bids 12/1, awarded 12/16. CD 11/8—ENR 11/16.

Wis., Kenosha — Kenosha Co., remodeling Willowbrook Sanatorium, modernize central section and west wing of building, incl. plumbing. **WPA. $129,283.** F. A. Sexton, Twin Lake, archt.

†**T. H. Pearl Harbor**—Yards & Docks, Navy Dpt., Wash., D. C., cold storage building. Spec. 9545, to Walker & Olund, Ltd., 820 Lower Pilkoi St., Honolulu **$241,700.** Bids 12/6, awarded 12/8.

COMMERCIAL BUILDINGS

PROPOSED WORK

★**Ia., Des Moines** — Edmundson Memorial, 2320 Terrace Rd., Des Moines, art gallery. $600,000. Site now being selected.

★**Mo., St. Louis**—Stix, Baer & Fuller Co., 7 St., at Washington Ave., bids early in 1940, installing air conditioning sys. for both summer and winter use, department store, 6 and 7 Sts. Washington and Lucas Aves. $400,000-$500,000; also new refrigeration plant for food departments and storage, $45,000.

★**N. Y., Astoria**—Riker Subdivision, Inc., 10 E. 40 St., New York, plans by Kohn & Simon, c/o owner, 6 story apartment, 49 St. and 31 Ave. $750,000.

★**O., Canton** — Ohio Bell Telephone Co., Cleveland, imprv. service of Canton exchange, incl. $125,000 for land, buildings, central office equip., $425,000 for station equip., $175,000 for outside plant, $25,000 general equip. Total est. $750,000. Private plans.

★**O., Columbus**—Ohio Bell Telephone Co., 100 N. 3 St., Cleveland, addns. to outside plant and central office, equip., necessary replacements and rehabilitation work. Total est. $2,000,000. Private plans.

BIDS ASKED

Bids Asked

Wis., Milwaukee—Owner, c/o H. L. Kuehnel, 2184 N. Sherman Blvd., 8 story, 60x123 ft., rein.-con., brick, steel apartment, Wisconsin Ave.

CONTRACTS AWARDED

Conn., New Haven—Dr. Robert J. Ferguson, 59 College St., 4 story, brick, steel, limestone, 60x65 ft., professional building, Whitney Ave., to Mott-Mohr Constr. Co., Inc., 440 Elm St. Est. **$150,000.** Bids 12/13. CD 12/8—ENR 12/14.

Fla., Miami—J. H. Mitchell, 1002 N.W. 47 St., residential construction in Mitchell Manor. Owner builds. **$150,000.** Curtis E. Haley, Seybold Bldg., engr.

Fla., Palm Beach—Coastal Realty Service Inc., C. Dickson, in charge, 215 South Olive Ave., residential construction. Owner builds. Over **$150,000.**

Ky., Louisville—Levy Tyler Land Co., c/o C. R. Trueheart, pres., 979 4 St., 3 story, bsmnt., 77x164 ft., brick, steel, concrete store, to Dahlem Constr. Co., 1249 S. Shelby St. Est. $300,000. Bids Nov. 21. F. W. Woolworth, Woolworth Bldg., New York City, lessee. CD 11/16—ENR 11/30.

Mass., Natick—Owner, c/o M. Parker, 104 Lagrange St., Brookline, residential development, constructing new streets for 110 houses and 40 houses Frost and Winter Sts., to M. Parker, 104 Lagrange St., Brookline. Est. over **$150,000.** FHA financing. Private plans.

Mass., Weston—M. Parker, 104 Lagrange St., Brookline, 35 frame residences, Weston Rd. sect. Owner builds. Est. **$190,000.** Private plans. FHA mortgage security.

★**Mo., St. Louis**—Famous-Barr Co., F. Z. Salomon, genl. mgr., Olive St., at 6 St., general contract for installation air conditioning sys. for 13 story, 2 balcony department store, incl. altering, etc., 6 and 7, Olive and Locust St., installing refrigeration equip. in basement of Kingston building, south side of St. Charles St., to Carrier Corp., 302 S. Geddes St., Syracuse, N. Y. *** piping, to Eichler Heating Co., 21 25 Locust St.***electrical work, to S. C. Sachs Co., 817 N. 9 St. Total est. $700,000.

N. Y., Buffalo—Owner, c/o G. Morton Wolfe, archt., 1377 Main St., commercial building, stores, etc., Bailey Ave., to Garrick Constr. Co., W. Randolph St., Chicago, Ill. Est. **$150,000.**

N. Y., Elmhurst—Forest Dale Realty Corp., 500 5 Ave., New York, two 6 story apartments, 63-25 and 63-41 Saunders St. Owner builds. **$320,000.** B. Braunstein, 163-18 Jamaica Ave., Jamaica, archt. CD 11/21—ENR 11/30.

N. Y., Elmhurst—D. Minkin, 191 Joralemon St., Brooklyn, 6 story apartment, 88-11 63 Dr. Owner builds. **$400,000.** Kavy & Kavovitt, 16 Court St., Brooklyn, archts. CD 11/24—ENR 11/30.

N. Y., Elmira—Brookside Gardens Corp., c/o W. G. Lanphear & Son, archts., 11 Court St., Buffalo, ten 2 story, bsmnt., brick, apartment buildings, W. Water St., electrical refrigeration, etc., to Henry W. Streeter Corp., 608 William St. Est. **$425,000.**

★**N. Y., Long Island City**—D. Dinnerstein, 43-15 46 St., two 6 story apartments, 31-62 and 31-74 29 St. Owner builds. **$550,000.** Seelig & Finkelstein, 153 Pierrepont St., Brooklyn, archts. CD 11/21—ENR 11/30.

N. Y., New York—One Hundred and Thirty-Nine East Thirty Fifth Street, Inc., 136 E. 57 St., 12 story apartment, Lexington Ave. and 35 St., to Tishman Realty & Constr. Co., 136 E. 57 St. **$500,000.** H. I. Feldman, 415 Lexington Ave., archt.

N. Y., New York—Fordham University, Very Rev. R. I. Gannon, Pres., Fordham Rd., general contract new wings for St. John's Hall, to McMahon & McEntegart, Inc., 40 E. 49 St.***heating, to Johnson & Morris, 233 W. 18 St.***plumbing, to F. Habech, 2479 Elm Pl. Est. **$160,000.** O'Connor & Delaney, 162 E. 37 St., archts.

N. Y., Rego Park—Forest Dale Realty Corp., 500 5 Ave., New York, 6 story apartment, 62-11 Saunders St., **$225,000,** and 6 story apartment, 62-49 Saunders St., **$160,000.** Owner builds. B. Braunstein, 163-18 Jamaica Ave., Jamaica, archt. CD 11/24—ENR 12/7.

N. Y., Rego Park—Montal Realty Corp., c/o Shampan & Shampan, archts., 26 Court St., Brooklyn, 6 story apartment, 64 Rd. and Wetherole St. Owner builds. **$300,000.**

Pa., Erie—Hardscrabble Corp., c/o Andrews Land Co., Commerce Bldg., 1st unit of 10 dwellings, housing development, 8 mi. west of here, separate contracts under supervision of M. Wherley, White Swan Farm, West Lake Rd., R.D. 1. Total est. **$150,000.** C. S. Kirby, Commerce Bldg., archt. CD 12/1—ENR 12/14.

★**Pa., Phila.** — Bd. City Trusts, Lafayette Bldg., general contract except mechanical work, 4 story, bsmnt., reinforced steel, concrete commercial buildings, to McCloskey & Co., 1618 W. Thompson St. **$616,000.** Bids 11/29, awarded 12/8. CD 11/17—ENR 11/23.

Tex., Galveston—Galveston Cotton Exchange, c/o H. Kempner, pres., 2101 Ave. C, 2 story fireproof cotton exchange building, to Gulf Constr. Co., 3802 Calhoun Rd., Houston, **$118,000;** air conditioning, to Straus-Frank Co., 301 S. Flores St., San Antonio. CD 11/21—ENR 11/30.

Wis., Milwaukee—Kirchhoff & Rose, 730 N. Jackson St., general contract (except heating) 1 and 2 story, 50x137 ft., steel, concrete film exchange, to J. G. Jansen Constr. Co., 3001 N. 38 St. for Vitograph, Inc., 321 W. 44 St., New York, N. Y. CD 12/7—ENR 12/14.

INDUSTRIAL BUILDINGS

PROPOSED WORK

★**Fla., Fort Lauderdale** — DISTRIBUTING PLANT—Shell Oil Co., Shell Bldg., St. Louis, Mo., distribution plant, S. Miami Ave., in Port Everglades, suburb of Fort Lauderdale. $1,000,000. Private plans.

★**Ill., Chicago**—COOKIE PLANT—Salerno-Megowen Biscuit Co., 4500 W. Division St., 3 or 4 story, 236 x 233 ft. cookie plant, steel, concrete, Armitage and Kostner Aves. About $70,000. Architect not appointed.

★**La., Baton Rouge**—PLANT—Standard Oil Co., North Baton Rouge, expansion program, construction alkylation plant unit. $2,000,000. Engineer, c/o owner.

★**La., Lake Charles**—PLANT EXPANSION —Mathieson Alkali Works, Lake Charles, and 60 E. 42 St., New York, E. M. Allen, pres., I. V. Maurer, genl. mgr., New York, expanding present plant. $1,600,000. Private plans.

★**Tex., Baytown**—REFINERY—Humble Oil & Refining Co., expansion program for refinery plants and steel tank farm. About $2,500,000.

★**Tex., Harrisburg** — ALKYLATION PLANT — Shell Oil Co., Inc., Houston, second alkylation plant expansion project. Engineer, c/o owner. $1,000,000.

Tex., Ingleside—REFINING FACILITIES—Humble Oil & Refining Co., Ingleside, refining facilities, plant exten. and steel tank storage, etc.

B. C., Grand Forks—PLANT—Syndicate, c/o E. L. Cross, Kelowma, canning plant. $40,000. Architect c/o owner.

Ont., Hamilton—PLANT—Kraft Containers Ltd., H. S. Littlejohn, mgr., Hamilton, brick, steel plant exten., plain fdn., Cavell Ave. $40,000. Architect, c/o owner.

BIDS ASKED

Bids Asked January 15

Tex., Waxahachie—PLANT—J. P. Brough, archt., Gulf States Bldg., Dallas, 1 story 125x500 ft. furniture manufacturing plant for owner, c/o archt. $110,000. G. D. Anderson, Gulf States Bldg., Dallas, engr.

Wis., Edgar—PLANT — California Packing Co., Edgar, 1 story, 70x100 ft., brick, steel packing plant. H. C. Christensen, 6[illegible] S. Michigan Ave., Chicago, Ill., archt.

Bids Asked January 16

Kan., Kansas City — HEADHOUSE, etc. — Union Jobbing Assn., 610 North Quincy St., Topeka, rein.-con. headhouse and storage bins. Over $40,000. Horner & Wyatt, Bd. Trade Bldg., Kansas City, Mo., engrs. CD 12/30.

Bids Asked

Calif., Emeryville—PLANT—L. S. Rosener, engr., 223 Sansome St., San Francisco, rein.-con. linoleum manufacturing plant addn. for Paraffine Companies, Inc., Brannan St. near 4 St., San Francisco. Over $40,000.

Ill., Chicago — PLANT — Western Electric Co., Cicero Ave. and Cermak Bldg., 1 story, bsmnt., 90x100 ft. addn. to plant, Austin Blvd. and 66 Ave. $40,000. Private plans.

Tex., Grapeland—RECYCLING PLANT—Lone Star Trinity Gas Co., Grapeland and Crockett, recycling plant 30,000,000 cu. ft. daily capacity. $150,000.

CONTRACTS AWARDED

Conn., Bridgeport — HEADHOUSE, etc. — United Illuminating Co., 1115 Broad St., head house, transfer house, takeup house, steel point power generating plant, to Edwin Moss & Son, 555 Grant St. Est. **$40,000.** Westcott & Mapes, 139 Orange St., New Haven, engrs.

★**Fla., Miami**—GENERATING PLANT IMPROVEMENTS—Florida Power & Light Co., H. H. Hyman, mgr., Ingraham Bldg., excavation and sheet piling for addn. to main generating plant, near here, to Reed Constr. Co., c/o owner. Total cost **$3,000,000.**

Mass., Worcester—FACTORY—Arter Grinding Machine Co., 15 Sagamore Rd., 1 story, 92x101 ft., brick, steel factory addn., Sagamore Rd., to E. Whitehead, Inc., 62 School St. Est. **$40,000.** Private plans.

Mo., St. Louis—POWER PLANT—Monsanto Chemical Co., 2 and Soulard Sts., 1 story, 55x70 ft., brick, steel power house for chemical plant to be erected rear 1828 S. 2 St., to Fruin-Colnon Contg. Co., 502 Merchants Laclede Bldg. Est. **$75,000.** Stone & Webster Eng. Corp., 2 and Soulard Sts., engrs.

Mo., St. Louis—FACTORY—John Ramming Machine Co., 308 S. 1 St., 1 story, 80x100 ft., brick factory, concrete fdn., 4591 McRee Ave., to J. L. Muren, 3939 Fillmore St. Est. **$40,000** with equip. Private plans.

N. Y., Potsdam—SAWMILL—Elliott Hardwood Co., Pine St., 30x110 ft. sawmill, with 30x40 ft. el, incl. band saws, trimmers, cut-offs, motors, transformers, own forces. **$40,000.** Fire rebuild.

N. Y., Syracuse—PLANT—Post Standard, S. Warren St., extensive alterations to newspaper plant, to Dawson Bros. Constr. Co., Inc., Union Bldg. Est. over **$40,000.** CD 10/30—ENR 11/2.

O., Cincinnati—FACTORY—Cincinnati Chemical Works, Norwood, 3 story, 75x150 ft. steel, brick factory, to J. & F. Harig Co., 1425 Queen City Ave. Est. over **$40,000.** CD 11/14—ENR 11/16.

Pa., Reading — PLANT — Neversink Dye Works, Pear St., 3 story, 46x89 ft., brick, steel, plant addn., to L. H. Focht & Son, Inc., Baer Bldg., Est. **$40,000** with equip. Private plans.

R. I., East Greenwich—DAIRY PLANT—East Greenwich Dairy Co., East Greenwich, 3 story, 30x80 ft., brick, steel, rein.-con. dairy plant addn., to J. T. McCusker, 26 Lamphear St., West Warwick. Est. **$40,000.** CD 10/24—ENR 10/26.

Tex., Luling — STORAGE PLANT — Luling Foundation, Luling, general contract refrigerated locker storage plant, to W. C. Eads, Lockhart, **$14,787;** refrigeration, to Whitten Sales Co., 123 W. 6 St., Austin, **$5,000.** Bids 12/12. CD 12/8—ENR 12/14.

Tex., Waskom — ABSORPTION PLANT — Arkansas Fuel Oil Co., subsidiary of Cities Service Oil Co., Marshall, absorption plant to handle 25,000,000 ft. gas daily, in Waskom fields in northeast Harrison Co., own forces. **$100,000.**

★**Wis., Milwaukee**—POWER PLANT, etc.—Wisconsin Electric Power Co., 231 W. Michigan St., general contract 2 story, 79x134 ft. brick, steel addn. to power plant and heating plant, to Dahlman Constr. Co., W. Olive St.; structural steel, to Milwaukee Bridge Co., 3282 N. 34 St. Total est. **$4,000,000** with equip. F. Lieber, c/o owner, archt.

Wyo., Cheyenne — CREAMERY — Sunrise Creamery Co., 2 story, 91x125 ft. brick creamery, to Jacob Weber, 108 E. 6 Ave. Est. **$40,000.** CD 3/29—ENR 4/13.

Que., Montreal—PLANT—Robin Hood Flour Mills, Ltd., 300 St. Sacrament St., 65x254 ft. brick, rein.-con. plant exten., plain fdn., Wellington Basin, to L. G. Ogilvie & Co., Ltd., 1440 Ste. Catherine St. **$75,000.** CD 12/5—ENR 12/7.

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises.

RATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION
COPY RECEIVED UP TO 4 P. M. TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST-MINUTE ADS
SEND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.

Bids: January 10 (574)

Electric Distribution System Improvements

REHABILITATION OF
ELECTRIC DISTRIBUTION SYSTEM
FOR
THE CITY OF KNOXVILLE, TENNESSEE
P.W.A. DOCKET NO. TENN. 3289-P

Sealed proposals will be received at the office of the General Manager of the Electric Power and Water Board, 626 South Gay Street, Knoxville, Tennessee, until 10:00 A. M. (CST), Wednesday, January 10, 1940, for furnishing material and labor for the improvement of the electric distribution system for the City of Knoxville, Tennessee, as follows:

Contract D-2—Station Equipment Installations
Contract D-3—Station Structural Improvements
Contract E-1—Feeder Improvements

Proposals for furnishing equipment, labor and materials for complete installation of the above contract work at Knoxville, Tennessee, are requested.

Bidders may submit proposals on one or more contracts in accordance with proposal forms to be furnished by the City.

The Knoxville Electric Power and Water Board reserves the right to reject any or all bids, and to waive informalities therein.

All equipment must be in accordance with the plans and specifications, copies of which are on file, for free examination, in the office of the General Manager, 626 South Gay Street, Knoxville, Tennessee, and with the Burns & McDonnell Engineering Company, Kansas City, Missouri.

Specifications and plans may be obtained upon request from the office of Burns & McDonnell Engineering Company, 107 West Linwood Boulevard, Kansas City, Missouri. A deposit of $5.00 is required for the plans for each of these contracts. The entire deposit will be refunded to all except the successful bidder in case a bona fide bid is tendered and/or the plans and specifications are returned in good condition within 10 days after date of the letting.

All bidders must be licensed contractors as required by Chapter 70 of the Public Acts of 1931 of the General Assembly of the State of Tennessee, Section 1. Bidder's name and license must be placed on the outside of the sealed envelope containing the bid.

Each bid must be accompanied by a certified check or bidder's bond executed by the bidder and a surety company licensed to do business in Tennessee in the sum of ten per cent (10%) of the amount of the bid. The bond is required as a guarantee that if the bid is accepted, a contract will be entered into within ten (10) days after formal notification of award and the performance of it properly secured. The successful bidder will be required to execute a performance bond in the amount of one hundred per cent (100%) of the contract price.

Proposal forms must be properly filled out and must not be detached from the specifications. No qualifying letters or statements will be considered.

WAGES: Attention is called to the fact that no less than the minimum wage rates as set up in the specifications must be paid on this project.

WITHDRAWAL OF BIDS: No bidder may withdraw a bid submitted for a period of thirty days after the date set for the opening of such bids.

The estimated cost for the contracts is as follows:

Contract D-2	$68,000
Contract D-3	3,000
Contract E-1	40,000

Any bid received after the scheduled closing time for receipt of bids will be returned to the bidder unopened.

MAX C. BARTLETT
General Manager
Electric Power & Water Board
City of Knoxville, Tennessee

Bids: January 4 (550)

Electrical Work

CONTRACT NO. 7
P.W.A. PROJECT NO. PA. 1911-F

Separate sealed proposals will be received by The City of Harrisburg, Dauphin County, Pennsylvania, at the office of the Department of Public Safety in the Municipal Building until 11 A.M., Eastern Standard Time on the 4th day of January, A. D., 1940, for the electric work required in construction of the Control House, Intake Tower and Operators' Houses, including Dam Floodlighting and Dam Roadway Lighting at Clark Valley Dam, in Rush Township, Dauphin County, Pa., at which time and place they will be publicly opened and read aloud. Bids shall be addressed to The City of Harrisburg, William T. DeHart, Director, Department of Public Safety.

Copies of plans and specifications and other contract documents are on file and open to public inspection at the office of Gannett, Eastman & Fleming, Inc., and sets of such documents may be obtained from Gannett, Eastman & Fleming, Inc., 600 North Second Street, Harrisburg, Pa., upon deposit of Twenty-five Dollars ($25.00) for each set. If documents are returned in good condition within ten (10) days after the opening of bids, the full amount of the deposit for one set will be returned to each actual bidder; and other deposits will be refunded with a deduction of Fifteen Dollars ($15.00) to defray the actual cost of reproduction of the set of documents. If the documents are not returned within the time stated, the entire amount of the deposit will be forfeited.

The character and amount of bid security to be furnished by each bidder shall be cash, a certified check or Surety Company's bid bond in an amount not less than 5% of the total bid as stated in the Instructions to Bidders.

No bid may be withdrawn for thirty (30) days after the scheduled closing time for receipt of bids.

The City of Harrisburg reserves the right to waive any informalities in or to reject any or all bids.

THE CITY OF HARRISBURG,
William T. DeHart, Director Department of Public Safety.

Bids: January 4 (582)

Intercepting Sewer

THE SANITARY DISTRICT OF CHICAGO
WEST SIDE INTERCEPTING SEWER
CONTRACT NO. 1A

To Contractors:

Sealed proposals, endorsed "PROPOSAL FOR WEST SIDE INTERCEPTING SEWER, CONTRACT NO. 1A" will be received by the Clerk of The Sanitary District of Chicago at the office of said Sanitary District, Room 600, 910 South Michigan Avenue, Chicago, Illinois, until 1:30 P.M., Central Standard time, on Thursday, January 4, 1940, and will be opened publicly by the Board of Trustees of said Sanitary District at a meeting to be held on that day or at the first meeting thereafter.

The work for which said tenders are invited consists of building a connection from the existing Kostner Avenue sewer to the West Side Intercepting Sewer, with manholes and other miscellaneous work collateral thereto, including the removal of a portion of the adjoining spoil bank. The work is located in the City of Chicago.

The work includes excavation, lining and bracing, disposal of water, furnishing and placing of concrete, cast iron pipe, reinforcement steel and iron castings, backfilling, disposal of excess material and incidental work.

There shall be paid each employee engaged in work, at the site of the project, under this contract, not less than the general prevailing rates of per diem wages and the general prevailing rates for legal holiday and overtime work ascertained and prescribed in accordance with the provisions of "AN ACT regulating wages of laborers, mechanics and other workmen employed under contracts for public works," of the State of Illinois, filed July 26, 1939, which rates are fully set forth in Article 3 of the General Conditions and herewith are incorporated by references in this advertisement for bids the same as if such rates were completely set out herein in verbatim form.

All bids must be made on blank forms of proposal furnished by the Sanitary District, and shall be made in accordance with and to conform to the terms and conditions set forth in "Requirements for Bidding and Instructions to Bidders" attached thereto.

Said forms will be furnished by the Chief Engineer of The Sanitary District of Chicago upon application.

Specifications, form of proposal and plans may be obtained upon deposit of Twenty Dollars ($20.00) at the office of said Sanitary District which sum so deposited will be refunded if said plans and specifications are returned in good condition within thirty days following the opening of bids.

Each proposal must be accompanied by cash or a cashier's check or certified check on a responsible bank doing business in the City of Chicago, to the amount of Ten Thousand Dollars ($10,000.00) payable to the order of the Clerk of The Sanitary District of Chicago. Any proposal submitted without being accompanied by such cash or check will not be considered and will not be read after it is publicly opened.

The Board of Trustees of said Sanitary District reserves the right to reject any or all proposals.

THE SANITARY DISTRICT OF CHICAGO
By Ross A. Woodhull,
Chairman of Its Committee on Finance.

Attest:
James J. Sullivan,
Clerk
Chicago, December 21, 1939

Bids: January 2 (583)

Repairing Bulkhead

P.W.A. PROJECT MD. 1127-F
STATE ROADS COMMISSION
(Owner)
CALVERT COUNTY CONTRACT
C-101-2-823

Sealed proposals for placing hydraulic fill and repairing bulkhead, etc., along the Chesapeake Bay at Chesapeake Beach, will be received by the State Roads Commission at its office in the Federal Reserve Bank Building, Baltimore, Maryland, until 3 o'clock P.M. on January 2, 1940, which will be then and there publicly opened and read aloud.

The Information for Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Forms of Bid Bond and Performance Bond may be examined at said office and copies thereof obtained upon payment of $1.00 for each set.

The State Roads Commission reserves the right to waive any informalities in or reject any or all bids.

Each Bidder must deposit with his bid security in an amount of Five Hundred Dollars ($500.00) subject to the conditions provided in the Information for Bidders.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the contract.

The estimated cost of the work to be performed under this contract is $15,000.00.

No bidder may withdraw his bid within 30 days after the actual date of the opening thereof.

L. H. Stewart,
Secretary.

December 19, 1939

Who's Who and When and Where

GUIDE TO CONSTRUCTION BUYERS

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330 W. 42nd St., New York, N. Y.

U. S. GOVERNMENT

FEDERAL WORKS AGENCY, Public Roads Administration, Washington, D. C., December 11, 1939. SEALED BIDS will be received at the office of the Public Roads Administration, 219 Old Post Office Building, Vicksburg, Mississippi, until 11 o'clock a.m., C.S.T., January 25, 1940, for *the construction of two bridges, together with the grading and surfacing of approaches.* Project 3W2-3W3, Natchez Trace Parkway, Jefferson County, Mississippi. Length of project: 0.258 miles. The approximate quantities of the more important items are as follows: 7,000 cu.yd. excavation; 2,650 cu.yd. cement concrete; 415,000 lb. reinforcing steel; 665,000 lb. structural steel; 17,400 lin.ft. concrete piling. Minimum rates of wages for laborers and mechanics on this project have been fixed by the Secretary of Labor as required by law. Where plans and specifications are requested, a deposit of $10.00 in cash, or a certified check for $10.00 which must be made payable to the Treasurer of the United States, will be required to insure their return within 15 days after the opening of bids. Plans, specifications and bid forms may be obtained at the office of the District Engineer, Public Roads Administration, Room 123, Winder Building, 17th and F Streets N.W., Washington, D. C. Bid forms may be obtained and plans and specifications seen at the office of the Public Roads Administration, 219 Old Post Office Building, Vicksburg, Mississippi. H. J. Spelman, District Engineer. (565)

FEDERAL WORKS AGENCY, Public Buildings Administration, Washington, D. C., Dec. 15, 1939.—Sealed proposals in duplicate will be publicly opened in this office at 1 P.M., Standard Time, Jan. 16, 1940, for *the extension of the U.S.P.O. at Vancouver, Wash.* Upon application, one set of drawings and specifications will be supplied free to each general contractor interested in submitting a proposal. The above drawings and specifications MUST be returned to this office. Contractors requiring additional sets may obtain them by purchase from this office at a cost of $7 per set, which will not be returned. Checks offered as payment for drawings and specifications must be made payable to the order of the Treasurer, U. S. Drawings and specifications will not be furnished to contractors who have consistently failed to submit proposals. One set upon request, and when considered in the interests of the Government, will be furnished, in the discretion of the Commissioner, to builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any sub-contractor or material firm interested, and to quantity surveyors, but this privilege will be withdrawn if the sets are not returned after they have accomplished their purpose. W. E. Reynolds, Commissioner of Public Buildings, Federal Works Agency. (571)

WAR DEPARTMENT, Office of the Constructing Quartermaster, Chanute Field, Rantoul, Illinois. Sealed proposals will be received at this office until 12:00 Noon, Central Standard Time, January 10, 1940, and then publicly opened for the *construction and completion of Headquarters and Administration Building at Chanute Field, Rantoul, Illinois.* Plans and specifications will be furnished upon receipt of certified check for twenty-five dollars ($25.00), made payable to the Treasurer of the United States. (567)

U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed bids, in duplicate, will be received here until 10 a.m., E.S.T., January 19, 1940, and then publicly opened, for furnishing all labor and materials and performing all work for *dredging approximately 203,300 cu. yds. of material,* place measurement, from the channel and turning basin in Indian River at Cournenay, Fla. Further information on application. (578)

U. S. ENGINEER OFFICE, Providence, R. I. Sealed bids, in duplicate, will be received here until 2:00 p.m., January 5, 1940, for *removal and disposal of wreck of Barge VALENTINE* from Shaws Cove, New London Harbor, Connecticut. Further information on request. (569)

WAR DEPT., OFFICE OF CONSTRUCTING QUARTERMASTER, P. C. Dept., Albrook Field, C. Z. SEALED BIDS, in triplicate, subject to the conditions contained herein, will be received until 2 P.M., Eastern Standard Time, February 7, 1940, and then publicly opened for furnishing materials and equipment and performing all labor necessary to construct and complete the following groups of *Barracks in the Canal Zone,* exclusive of utilities, foundations and pedestals: Group 1, Pacific Sector, fifty nine (59). Group 2, Atlantic Sector, thirty one (31). Bids will be opened simultaneously in *a* New York at the office of Constructing Quartermaster, 90 Church Street, New York City; *b* San Francisco, at the office of Constructing Quartermaster, Fort Mason, California; and *c*, Canal Zone, at the office of Constructing Quartermaster, Panama Canal Department, Albrook Field, Canal Zone. Bids for above barracks will be received in two (2) groups, i.e., Group 1 and Group 2, one opening immediately following the other. Bids for a part of Group 1 or Group 2 will not be considered. Plans and specifications are available from offices of the above Constructing Quartermasters upon deposit of One Hundred Dollars ($100) certified check made payable to Finance Officer, U. S. Army, Information upon application to the Constructing Quartermaster, Panama Canal Department, U. S. Army, Albrook Field, Canal Zone. (579)

UNITED STATES ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, N. Y., Room 710, 39 Whitehall St., New York, N. Y. Sealed bids will be received until 12:00 noon, January 5, 1940, and then publicly opened, for furnishing all labor and materials and performing all work for the *removal and satisfactory disposal of approximately 2,940 cubic yards,* place measurement of ledge rock and approximately 250,800 cubic yards, place measurement of material other than ledge rock from East Chester Creek, New York. (530)

U. S. ENGINEER OFFICE, Wilmington, N. C. Sealed bids in duplicate will be received until 12 o'clock noon, January 10, 1940, and then publicly opened for furnishing all labor and materials and performing all work for *dredging approximately 73,000 cubic yards of material* from Rollinson Channel and Far Creek, N. C. Further information upon application. (537)

WAR DEPARTMENT, Office of the Constructing Quartermaster, Southeast Air Base, Tampa, Florida. Sealed proposals, in triplicate, will be received at this office until 10:00 A.M., E.S.T., January 17, 1940, and then publicly opened, for the *construction and completion of one (1) Photographic Laboratory Building and three (3) Double N.C.O. Quarters* at Southeast Air Base, Tampa, Florida. Plans and specifications may be obtained at the above office, accompanied by a certified check in the amount of $10.00. Check made payable to the Finance Officer, U. S. Army, Fort McPherson, Georgia. (581)

UNITED STATES ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, N. Y., Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed bids will be received until 12:00 noon, January 11, 1940, and then publicly opened, for furnishing all labor and materials and performing all work for *excavating and satisfactorily disposing of approximately 133,700 cubic yards,* place measurement, of *ledge rock* and *13,900 cubic yards,* place measurement, *of material other than ledge rock* from Section 7 Area 7 of the New York and New Jersey Channels. (544)

WAR DEPARTMENT, Office of the Constructing Quartermaster, Wright Field, Dayton, Ohio. Sealed proposals will be received at this office until 11:00 A.M., E.S.T., January 5, 1940, and then publicly opened for *construction and completion of Test Chamber — Superstructure, Power Building Unit and Three Traveling Cranes* for 20 foot Wind Tunnel, at Wright Feld, Dayton, Ohio. Plans and specifications will be furnished upon deposit of certified check in amount of $50.00, made payable to Treasurer of the U. S. Information at the above address. (536)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., December 15, 1939. Sealed bids (Specifications No. 890) will be received at the office of the U. S. Bureau of Reclamation, Old Post Office Building, Sacramento, California, until 10 A.M., January 15, 1940, and will at that hour be publicly opened for furnishing labor and materials and performing all work for the *construction of earthwork, canal lining and structures,* Contra Costa Canal, station 1542+72 to station 1993+11, Delta division, Central Valley project, California. The work is located near Concord, California. The principal items of work and the estimated quantities involved are as follows: 24 acres of clearing orchards and vineyards; 22 acres of grubbing orchards and vineyards; 340,000 cubic yards of excavation for canal; 250,000 station cubic yards of overhaul; 15,000 cubic yards of compacting embankments; 9,000 cubic yards of excavation for structures; 113,000 square yards of trimming foundations for concrete lining; 16,000 cubic yards of backfill; 1,875 cubic yards of concrete in structures; 9,300 cubic yards of concrete in canal lining; 500 square yards of dry-rock paving; placing 830,000 pounds of reinforcement bars; erecting 180 M ft. b. m. of timber in structures, except cattle guards; constructing 16 cattle guards; laying 1,440 linear feet of 12- to 30-inch diameter concrete pipe; installing 2,500 pounds of 18-inch diameter metal pipe; and installing 23,000 pounds of gates and miscellaneous metalwork. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor, and those furnished by the Government are described in the specifications which will be a part of the contract. Guarantee will be required with each bids in an amount not less than 10 per cent of the amount of the bid. Performance bond will be required in an amount not less than 50 per cent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the amount of one-half of the total amount payable by the terms of the contract. Partial payments will be made monthly. The work shall be commenced within thirty (30) calendar days after date of receipt by the contractor of notice to proceed and shall be completed within four hundred and fifty (450) calendar days from the date of receipt of such notice. Liquidated damages for delay will be fifty dollars ($50) per day for each uncompleted schedules. No charge to prospective bidders for copies of the specifications and drawings; to others $3.50 not returnable. For particulars, address the Bureau of Reclamation, Sacramento, California; Denver, Colorado; or Washington, D. C. John C. Page, Commissioner (584)

U. S. ENGINEER OFFICE, P. O. Box 59, Louisville, Ky. Sealed bids will be received until 11:00 A.M. (C.S.T.) January 9, 1940, and then opened for *constructing approximately 11,590 linear feet of revetment* on the Kentucky bank of the Ohio River above Dam 48. Further information on application. (540)

WAR DEPARTMENT, Office Constructing Quartermaster, Lowry Field, Colorado. Sealed proposals in triplicate will be received at this office until 11:00 a.m., (MST) January 3, 1940, and then publicly opened for the *construction and completion of Air Corps Hangar No. 2 and annexes at Lowry Field, Colorado.* Plans and specifications may be obtained by deposit of certified check for Fifty Dollars, payable to Treasurer, United States. For information apply to above address. (541.)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., December 14, 1939. Sealed bids (Specifications No. 891) will be received at the office of the Bureau of Reclamation, Denver, Colorado, until 2 P.M., January 11, 1940, and will at that hour be opened, for furnishing and delivering f.o.b. cars at the shipping point or f.o.b. cars at Rutledge, Texas, at the option of the bidder, *seven hundred and twenty trashracks* for the outlet works at the Marshall Ford Dam, Colorado River project, Texas. The trashracks will be installed by the Government. No charge for copies of specifications to prospective bona fide bidders; to others, $1.00 not returnable. For particulars, address the Bureau of Reclamation, Denver, Colorado, or Washington, D. C. JOHN C. PAGE, Commissioner. (586)

U. S. GOVERNMENT

FEDERAL WORKS AGENCY, Public Roads Administration, Washington, D. C., December 19, 1939. SEALED BIDS will be received at the office of the Superintendent, Shirley House, Vicksburg National Military Park, Vicksburg, Mississippi, until 11 o'clock a.m., C.S.T., January 18, 1940, for *grading, draining and the construction of reinforced concrete pavement*, and other work. Length: 0.809 mile. Project 6A1, Vicksburg National Military Park, Warren County, Mississippi. The approximate quantities of the more important items are as follows: 2 acres clearing and grubbing; 37,500 cu.yd. excavation; 8,700 sq.yd. reinforced concrete pavement; 1,900 lin.ft. 15 and 18 inch standard reinforced concrete culvert pipe and corrugated galvanized sheet metal pipe; 190,000 sq.ft. cutting, lifting and placing sod (including furnishing). Minimum rates of wages for laborers and mechanics on this project have been fixed by the Secretary of Labor as required by law. Where plans and specifications are requested, a deposit of $10.00 in cash, or a certified check for $10.00 which must be made payable to the Treasurer of the United States, will be required to insure their return within 15 days after the opening fo bids. Plans, specifications and proposal forms may be obtained at the office of the District Engineer, Public Roads Administration, Room 123, Winder Building, 17th and F Streets, N.W., Washington, D. C. Bid forms may be obtained and plans and specifications seen at the office of the Public Roads Administration, 219 Old Post Office Building, Vicksburg, Mississippi. H. J. Spelman, District Engineer. (589)

WAR DEPARTMENT: United States Engineer Office, Galveston, Texas. Sealed bids will be received until 2:00 P.M., January 26, 1940, and then publicly opened for furnishing all labor and materials and performing all work for *dredging approximately 278,500 cubic yards of material* from Dickinson Bayou Channel, Texas, from Station 200+00 to Station 0+00 (Bay Section) and from Station 0+00 to Station 82+00 (Bayou Section). A channel distance of 28,200 feet. Further information on application. (588)

FEDERAL WORKS AGENCY, Public Roads Administration, Washington, D. C., December 18, 1939. SEALED BIDS will be received at the office of the Public Roads Administration, Room 123, Winder Building, 17th and F Streets, N. W., Washington, D. C., until 11 o'clock A.M., E.S.T., January 11, 1940, for *grading, paving* and incidental structures and other work. Length: 0.552 miles, Project 6A8, National Capital Parks, District of Columbia. The approximate quantities of the more important items are as follows: 28,000 cu.yd. excavation; 16,000 cu.yd. gravel base course; 4,200 cu.yd. dry choked stone or slag base course; 2,200 tons type H-1 cold asphalt concrete pavement; 2,400 lin.ft. 24" reinforced concrete culvert pipe; 3,600 lin.ft. 6" clay sewer pipe underdrain; 7,700 lin.ft. concrete curb. Minimum rates of wages for laborers and mechanics on this project have been fixed by the Secretary of Labor as required by law. Where plans and specifications are requested, a deposit of $10.00 in cash, or a certified check for $10.00 which must be made payable to the Treasurer of the United States, will be required to insure their return within 15 days after the opening of bids. Plans, specifications and proposal forms may be obtained at the office of the District Engineer, Public Roads Administration, Room 123, Winder Building, 17th and F Streets, N.W., Washington, D.C. H. J. Spelman, District Engineer. (585)

CONTRACTORS WATCH THIS SECTION

for New Projects

Publish your announcements thru the "Proposal Section" of Engineering News-Record and get their bids.

Make Your Plans Accessible to Distant Bidders

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OFFICIAL PROPOSALS

Bids: December 28 (587)

Dredging

STATE OF NEW JERSEY
BOARD OF COMMERCE AND NAVIGATION
STATE HOUSE
TRENTON, NEW JERSEY
December 18, 1939

Sealed proposals for nine dredging projects designated as:

Project

136—City Channel at Port Newark, City of Newark, Essex County, N. J.
137—West Creek, Eagleswood Twp., Ocean County, N. J.
138—Nacote Creek at City of Port Republic, Atlantic County, N. J.
139—Oyster Creek, Galloway Twp., Atlantic County, N. J.
140—Grassy Bay, vicinity of Black Point, Galloway Twp., Atlantic County, N. J.
141—Broad Thoroughfare, Egg Harbor Twp., Atlantic County, N. J.
142—Beach Thoroughfare, vicinity 9th St., Ocean City, Cape May County, N. J.
143—Crook Horn Thoroughfare, West 50th St., Ocean City, Cape May County, N. J.
144—Sunset Lake, Borough of Wildwood Crest, Cape May County, N. J.

will be received at the office of the Board of Commerce and Navigation, State House, Trenton, New Jersey, at 2:00 P. M., Eastern Standard Time, Thursday, December 28, 1939, and then publicly opened and read aloud.

Plans and specifications may be viewed at the office of the Board of Commerce and Navigation at No. 1060 Broad Street, Newark, New Jersey, or in the State House, Trenton, New Jersey, or will be furnished persons upon request at the Newark office.

No proposal will be considered unless accompanied with Cash or Certified Check made payable to the order of the Board of Commerce and Navigation of New Jersey for at least five per centum (5%) of the total amount bid, Revised Statutes of New Jersey 52: 34-2.

The Board of Commerce and Navigation reserves the right to waive any informalities in or to reject any or all bids.

FRANK D. HOLMES,
Director and Secretary.

Bids: January 17 (591)

Diesel Engine Generators

POWER PLANT
FOR
THE CITY OF PLATTSBURGH,
NEW YORK

Sealed proposals will be received by the City of Plattsburgh, State of New York, at the office of the City Clerk, until 1:00 P. M., E. S. T., Wednesday, January 17, 1940, for furnishing the necessary labor, material, and equipment, for:

CONTRACT NO. 1
DIESEL ENGINE GENERATORS

Immediately following the closing time for receiving bids, the bids will be publicly opened and read aloud.

All equipment, material and labor must be in accordance with the plans and specifications on file in the office of the City Clerk of said city and with Burns & McDonnell Engineering Company of Kansas City, Missouri, at which places they are available for inspection by prospective bidders.

Specifications, proposal, and contract documents desired for the purpose of bidding may be obtained from the Burns & McDonnell Engineering Company, 107 West Linwood Boulevard, Kansas City, Mo. No deposit will be required.

Each bid must contain the full name of every person or company directly interested in the same and be accompanied by a bidder's bond to the satisfaction of the Purchaser, in the sum of five per cent (5%) of the base bid price, or a certified check of like amount on some solvent bank, payable to the City Treasurer, as a guaranty that if the bid is accepted a contract will be entered into and its performance properly secured within ten (10) days after award of contract. Should any bid be rejected such check or bond will be forthwith returned to the bidder, and should any bid be accepted such check will be returned upon the proper execution and securing of the contract.

Bidders are required to use the printed forms which are contained in the Contract Documents.

The right is reserved to reject any and all bids and to waive informalities.

No bid can be withdrawn within thirty (30) days after the bid opening date.

A performance bond in the full amount of the contract sum and of the specified character is required of the successful bidder.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the contract.

The estimated cost of the work to be performed under this contract is $175,000.00.

By order of the City Commission.

CITY OF PLATTSBURGH, NEW YORK
WALTER ARBENGER, City Clerk

BURNS & McDONNELL
Engineering Company
107 West Linwood Boulevard
Kansas City, Missouri
Consulting Engineers

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You undoubtedly want their bids on your contracts. Make sure of them on your next contract.

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ADDITIONAL OFFICIAL PROPOSAL ADVERTISING ON PAGE 24

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Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

Copy for new advertisements received until 10 A. M. Friday for Thursday's issue.

POSITIONS WANTED

(See also "Selling Opportunity Wanted")

WANTED: Layout engineer experienced and accurate, on construction project in South Carolina. Salary $200 per month. State age, references, where employed and how long on layout. Give capacity of employment, name of immediate superior. P-120, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

CONTRACTOR'S ENGINEER WANTED: On South Carolina dam project. Must have had experience on heavy construction including work layout, wood form design, etc. State references, capacity in which previously employed, names and addresses of immediate superiors and salary required. P-121, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

CONSTRUCTION SUPERINTENDENT, Civil Engineer and Bricklayer Foreman, N. Y. State Professional Engineer and Land Surveyor: 10 years experience, layout, timekeeper, inspector, estimator, plant maintenance. Superintendent and union bricklayer foreman on large central schools, full charge all brick and stone work. Age 36, married, employed, location immaterial, references, prefer permanent connection. James Alverson, Avon, N. Y.

POSITIONS WANTED

STEEL SUP'T — Experienced, Bridges, Tunnels, Viaducts and all types Structural, reinforced Rods. Past Four years, with one of largest General Contractor in East. Good labor contacts. Go anywhere. PW-112, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

SUPERINTENDENT 28 years experienced Bridges, Harbor work, Dams, Reservoirs, Sewage disposal plants, pipe lines, and all heavy Engineering Construction. PW-59, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CIVIL ENGINEER, graduate, 30 years experience, design, construction, power plants, industrial plants, water supply, hydro-electric developments. PW-103, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

GENERAL SUPERINTENDENT, Long experience full inclusive charge of industrial, residential, commercial and government buildings. Extensive background in detail of field and office. An efficient, dependable superintendent. Well recommended. Anywhere. PW-102, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

SELLING OPPORTUNITIES

OFFERED—WANTED

Selling Agencies—Sales Executives
Salesmen—Additional Lines

OPPORTUNITY OFFERED

SALES ENGINEER WANTED, one who has had experience in the sale of Steel Floor and Roof Deck. Only men of proven sales ability will be considered. Graduate Civil Engineer preferred. Applications will be held strictly confidential. Write Building Products Division, Wheeling Corrugating Company, Wheeling, West Virginia.

OPPORTUNITIES WANTED

SALES ENGINEERS, Contracting Engineers since 1909. Valuable contacts in Business, Professional and Government circles. Available to represent you and guard your interests. Commission basis. Barney & Company, 1265 Broadway, New York.

OFFICIAL PROPOSALS

Bids: January 4 (552)

Control House Equipment, Piping and Appurtenances

CONTRACT NO. 10
P.W.A. PROJECT NO. PA. 1911-F

Separate sealed proposals for the Control House Equipment, Piping and Appurtenances at Clark Valley Dam, Rush Township, Dauphin County, Pennsylvania, will be received by The City of Harrisburg, Dauphin County, Pennsylvania, at the office of the Department of Public Safety in the Municipal Building until 11 o'clock A.M., E.S.T., the 4th day of January, 1940, at which time and place they will be publicly opened and read aloud. Bids shall be addressed to The City of Harrisburg, William T. DeHart, Director, Department of Public Safety.

Copies of plans and specifications and other contract documents are on file and open to public inspection at the office of Gannett, Eastman & Fleming, Inc., and sets of such documents may be obtained from Gannett, Eastman & Fleming, Inc., 600 North Second Street, Harrisburg, Pa., upon deposit of Twenty-five Dollars ($25.00) for each set. If documents are returned in good condition within ten (10) days after the opening of bids, the full amount of the deposit for one set will be returned to each actual bidder; and other deposits will be refunded with a deduction of Fifteen Dollars ($15.00) to defray the actual cost of reproduction of the sets of documents. If the documents are not returned within the time stated, the entire amount of the deposit will be forfeited.

The character and amount of bid security to be furnished by each bidder shall be either cash, a certified check, or Surety Company's bid bond in an amount not less than 5% of the total bid as stated in the Instructions to Bidders.

No bid may be withdrawn for thirty (30) days after the scheduled closing time for receipt of bids.

The City of Harrisburg reserves the right to waive any informalities in or to reject any or all bids.

THE CITY OF HARRISBURG,
William T. DeHart, Director Department of Public Safety.

Bids: January 4 (554)

Control and Operators' Houses

CONTRACT NO. 8
P.W.A. PROJECT NO. PA. 1911-F

Separate sealed proposals for the Heating Work required in the construction of the Control House and two Operators' Houses at Clark Valley Dam, Rush Township, Dauphin County, Pennsylvania, will be received by The City of Harrisburg, Dauphin County, Pennsylvania, at the office of the Department of Public Safety in the Municipal Building until 11 o'clock A.M., E.S.T., the 4th day of January, 1940, at which time and place they will be publicly opened and read aloud. Bids shall be addressed to The City of Harrisburg, William T. DeHart, Director, Department of Public Safety.

Copies of plans and specifications and other contract documents are on file and open to public inspection at the office of Gannett, Eastman & Fleming, Inc., and sets of such documents may be obtained from Gannett, Eastman & Fleming, Inc., 600 North Second Street, Harrisburg, Pa., upon deposit of Twenty-five Dollars ($25.00) for each set. If documents are returned in good condition within ten (10) days after the opening of bids, the full amount of the deposit for one set will be returned to each actual bidder; and other deposits will be refunded with a deduction of Fifteen Dollars ($15.00) to defray the actual cost of reproduction of the sets of documents. If the documents are not returned within the time stated, the entire amount of the deposit will be forfeited.

The character and amount of bid security to be furnished by each bidder shall be either cash, a certified check, or Surety Company's bid bond in an amount not less than 5% of the total bid as stated in the Instructions to Bidders.

No bid may be withdrawn for thirty (30) days after the scheduled closing time for receipt of bids.

The City of Harrisburg reserves the right to waive any informalities in or to reject any or all bids.

THE CITY OF HARRISBURG,
William T. DeHart, Director Department of Public Safety.

Bids: January 4 (553)

Plumbing Work

CONTRACT NO. 9
P.W.A. PROJECT NO. PA. 1911-F

Separate sealed proposals will be received by The City of Harrisburg, Dauphin County, Pennsylvania, at the office of the Department of Public Safety in the Municipal Building until 11 A.M., Eastern Standard Time, on the 4th day of January, A.D., 1940, for the Plumbing Work required in the Construction of the Control House and Operators' Houses at Clark Valley Dam, in Rush Township, Dauphin County, Penna., at which time and place they will be publicly opened and read aloud. Bids shall be addressed to The City of Harrisburg, William T. DeHart, Director, Department of Public Safety.

Copies of plans and specifications and other contract documents are on file and open to public inspection at the office of Gannett, Eastman & Fleming, Inc., and sets of such documents may be obtained from Gannett, Eastman & Fleming, Inc., 600 North Second Street, Harrisburg, Pa., upon deposit of Twenty-five Dollars ($25.00) for each set. If documents are returned in good condition within ten (10) days after the opening of bids, the full amount of the deposit for one set will be returned to each actual bidder; and other deposits will be refunded with a deduction of Fifteen Dollars ($15.00) to defray the actual cost of reproduction of the sets of documents. If the documents are not returned within the time stated, the entire amount of the deposit will be forfeited.

The character and amount of bid security to be furnished by each bidder shall be either cash, a certified check, or Surety Company's bid bond in an amount not less than 5% of the total bid as stated in the Instructions to Bidders.

No bid may be withdrawn for thirty (30) days after the scheduled closing time for receipt of bids.

The City of Harrisburg reserves the right to waive any informalities in or to reject any or all bids.

THE CITY OF HARRISBURG,
William T. DeHart, Director Department of Public Safety.

Bids: January 4 (551)

General Construction

CONTRACT NO. 6
P.W.A. PROJECT NO. PA. 1911-F

Separate sealed proposals will be received by The City of Harrisburg, Dauphin County, Pennsylvania, at the office of the Department of Public Safety in the Municipal Building until 11 A.M. Eastern Standard Time on the 4th day of January, A. D., 1940, for the general construction, exclusive of Control Equipment and Piping, Plumbing, Heating and Electric Work, of the Control House Superstructure and Operators' Houses at Clark Valley Dam, at which time and place they will be publicly opened and read aloud. Bids shall be addressed to The City of Harrisburg, William T. DeHart, Director, Department of Public Safety.

Copies of plans and specifications and other contract documents are on file and open to public inspection at the office of Gannett, Eastman & Fleming, Inc., and sets of such documents may be obtained from Gannett, Eastman & Fleming, Inc., 600 North Second Street, Harrisburg, Pa., upon deposit of Twenty-five Dollars ($25.00) for each set. If documents are returned in good condition within ten (10) days after the opening of bids, the full amount of the deposit for one set will be returned to each actual bidder; and other deposits will be refunded with a deduction of Fifteen Dollars ($15.00) to defray the actual cost of reproduction of the sets of documents. If the documents are not returned within the time stated, the entire amount of the deposit will be forfeited.

The character and amount of bid security to be furnished by each bidder shall be either cash, a certified check, or Surety Company's bid bond in an amount not less than 5% of the total bid as stated in the Instructions to Bidders.

No bid may be withdrawn for thirty (30) days after the scheduled closing time for receipt of bids.

Quantities in this proposed contract are:
Control House Superstructure.....1 unit
Operators' Houses.....2 units

The City of Harrisburg reserves the right to waive any informalities in or to reject any or all bids.

THE CITY OF HARRISBURG,
William T. DeHart, Director Department of Public Safety.

Bids: January 11 (590)

Bronze Tablets

COMMONWEALTH OF MASSACHUSETTS
METROPOLITAN DISTRICT WATER SUPPLY COMMISSION
PWA DOCKET NO. MASS. 1551-F
MASS. STATE PROJECT NO. D-208

Sealed proposals, prepared on the prescribed form and in accordance with instructions therein will be received at the office of the Metropolitan District Water Supply Commission, 20 Somerset Street, Boston, Massachusetts, until 11 A.M., Eastern Standard Time, Thursday, January 11, 1940, and then at said office publicly opened and read aloud, for Contract No. 101 for furnishing, delivering and erecting in the towns of Barre, Belchertown, Marlborough, Ware, West Bolyston and Weston, Massachusetts, bronze tablets. Each proposal must be accompanied by a deposit of security in the amount of at least 5% of the total bid price. A bond in at least the full amount of the contract will be required of the successful bidder to secure the faithful performance of the contract, and for the payment of all persons performing labor or furnishing materials in connection therewith. Special attention is called to the requirements as to conditions of employment to be observed and to the minimum rates of wages prescribed under the provisions of Chapter 461, Acts of 1935, by the State Commission of Labor and Industries, for the construction of this public work. A schedule of such rates is incorporated in the contract documents and is on file and may be obtained at the office of the Metropolitan District Water Supply Commission. The information for bidders, form of proposal, form of contract, plans, specifications and forms of bid bond and performance bond may be examined at the above address, and copies thereof obtained from Karl R. Kennison, Chief Engineer of the Commission, upon the deposit of $5, to be refunded only to bidders or to others returning them within ten days after the opening of bids. The site of the work may be seen by applying at the office of the Engineer in the Commission's Administration Buildings in Belchertown, Massachusetts. The Commonwealth reserves the right to waive any informality in or to reject any or all proposals. No bidder may withdraw his bid within thirty days after the actual date of the opening thereof. A proposal which includes for any item a bid that is abnormally low or high may be rejected as unbalanced.

R. NELSON MOLT, Secretary.
December 16, 1939.

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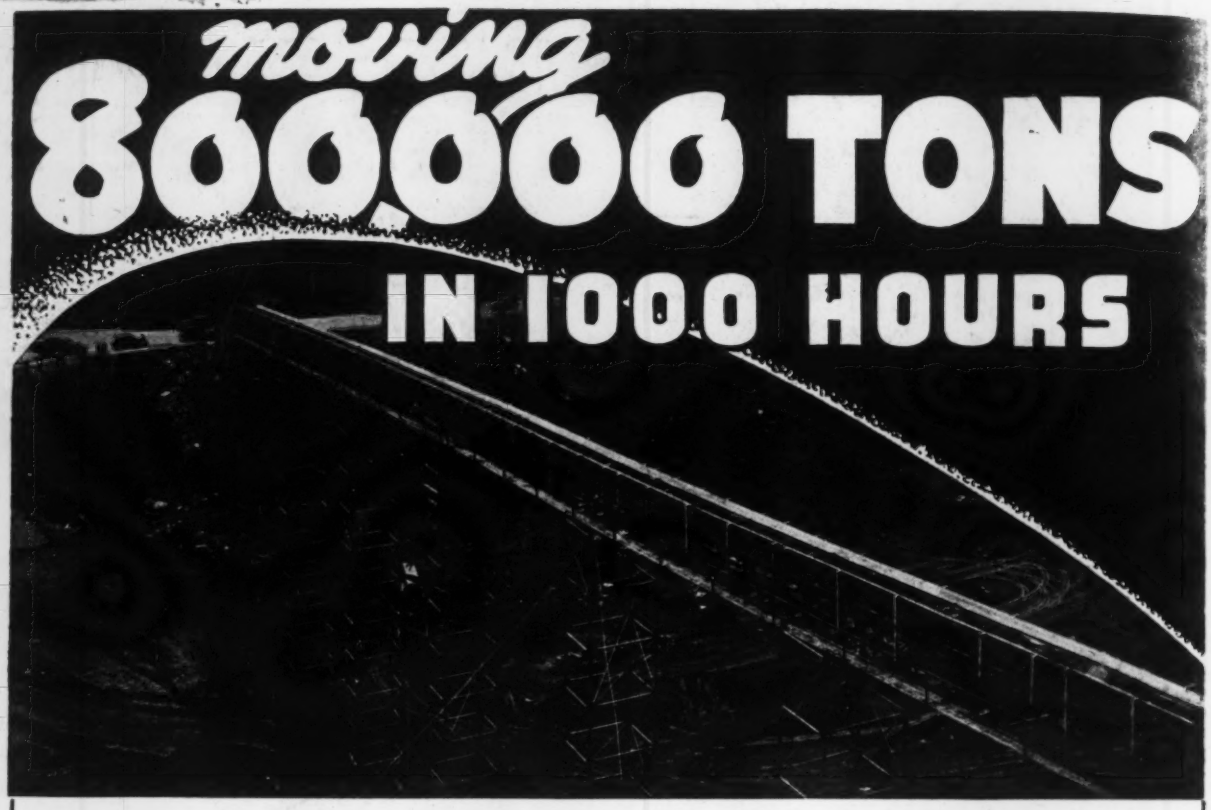

IN this interesting Pittsburgh job, the Harrison Construction Company is moving 800,000 tons with this Barber-Greene 42″ x 350′ Belt Conveyor at 800 tons per hour. The top of a hill is being removed for a housing project, and the excavated material conveyed out into a valley as a fill for a future playground. The excavated material, which includes stones as large as 20″ x 24″, is received by two Barber-Greene apron feeders which feed the B-G Conveyor. The Harrison Construction Company had many reasons for selecting Barber-Greene: quicker delivery; easier erection; drives and take-ups all factory assembled and aligned; and high versatility.

Barber-Greene's Standardized Sectional Construction will enable them to adapt their conveyor to practically any future job, and always insure a high resale value. Write for the Barber-Greene Conveyor Catalog. There is no obligation.

39-26